HOW TO READ COURSE DESCRIPTIONS

COURSE NUMBERING SYSTEM

100 - 299  Introductory courses or courses normally taken during the freshman and sophomore years.
300 - 399  Courses normally taken in the junior or senior years.
400 - 499  Courses normally taken by seniors; open to graduate students if noted.
500 - 699  Courses open only to graduate students.

CORE CURRICULUM REQUIREMENT NOTATIONS
Courses designated as satisfying core curriculum requirements are noted as such in the course description by a code (i.e., CSOC equates to Social or Behavioral Science).
See “Core Curriculum Course Notations” in this catalog for more detailed information.
For a listing of core curriculum requirements and the academic categories under which they fall, please refer to the “Undergraduate Academic Programs” section of this catalog.

PREREQUISITE NOTATIONS
Prerequisites, if any, are indicated in the course description. Students must have the necessary prerequisite for each course. Prerequisites are indicated with the individual course listing and are enforced at the time of registration. Prerequisite courses taken at institutions other than Bridgewater State University must be documented (transcript or grade report, and in some cases course description) prior to registration.
Students who wish to enroll in a course without the prerequisite must obtain a Prerequisite Override form prior to registering for the course. The form must be signed by the chairperson of the department through which the course is offered and, in some cases, the instructor of the course. Students seeking an override of professional education prerequisites for courses taught through the College of Education and Allied Studies must complete a Request for a Student to Take an Upper Level Professional Education Course Without Formal Program Admission to a Professional Education Program form and obtain all required signatures.

SEMESTER NOTATIONS
In some course descriptions, a semester designation indicating when the course can normally be expected to be offered is noted. This information is provided to assist students and their advisers in planning their programs. Please note, however, that all course listings published are subject to change, and that the college reserves the right to cancel courses or sections with inadequate enrollment.

FORMER COURSE NUMBER NOTATIONS
Some courses have had a recent change in their course number. The former number is noted in the course description. Credit will not be given for a course repeated under a different number.

CROSS-LISTED COURSES
In some cases, a course in one discipline may be cross-listed with another course in a different discipline. Course descriptions will be listed under each course prefix in the appropriate discipline. For example, ATTR/PHED 511 Research Methods in Physical Education will be listed under ATTR (Athletic Training) and PHED (Physical Education). Students may enroll in such courses under either discipline, but not both.

ADDENDA NOTATIONS
Changes to course descriptions effective the spring semester following the publication of the current catalog are identified in the individual course description by the following notation: Addenda: This course has been changed effective spring 2012. See the Catalog Addenda section of this publication for detailed information.
For a listing of new courses effective the spring semester following the publication of the current catalog, see the Catalog Addenda section of this publication for detailed information.

MEETING TIMES
Courses offered during evening hours normally meet once a week for a full semester or a quarter. Unless specified otherwise, day session courses meet for three 50-minute periods or two 75-minute periods per week for one semester. Departures from this rule, such as laboratory and studio periods and quarter courses, are indicated in the course description.
ACCOUNTING AND FINANCE

ACFI 100 Fundamentals of Financial Reporting (3 credits)
This course provides a general introduction to financial reporting issues. The topics covered will be an introduction to the basic financial statements: income statement, balance sheet and the cash statement. It will also cover internal control, ratio analysis and the financial reporting of accounts receivable, inventory, long-term assets, liabilities and stockholders' equity. (CQUR)

ACFI 150 Personal Finance (3 credits)
This course examines a range of alternative investments with regard to risk and liquidity. It analyzes and compares such investments as real estate, business ownership, securities and other investment types, considering the effects of taxation and inflation. (CQUR)

ACFI 199 First Year Seminar (3 credits)
Prerequisite: Open to all freshmen with a writing placement score of 3 or above or a SAT score of 500 or above or who have completed ENGL 101. Students with 24 or more transfer credits will have this requirement waived
First Year Seminars (FYS) are writing-intensive topic courses that introduce students to academic thought, discourse and practices. FYS courses prepare and orient students toward productive and fulfilling college careers by actively engaging them in a specific academic area of interest. Students will improve their writing, reading, research and basic information and technology skills while learning to work both collaboratively and independently. These courses will fulfill the First Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one FYS course may be taken for credit. (CFYS)

ACFI 200 Financial Accounting (3 credits)
Prerequisite: ACFI 100
This course will develop the student's knowledge of both the preparation and use of financial statements as they relate to the fields of accounting and finance. Course coverage will include in-depth review of the accounting cycle, concentrating on the adjustment process and the articulation and preparation of the financial statements. The course will place emphasis on accounts receivable, inventory and cost of goods sold, property, plant and equipment, debt, equity and financial ratios and techniques to interpret the quality of earnings of publicly-held corporations. (CQUR)

ACFI 298 Second Year Seminar (Speaking Intensive) (3 credits)
Prerequisite: _ _ _ _ 199; Open to all sophomores and juniors who have completed ENGL 101, and the speaking skills requirement. Students with 54 or more transfer credits will have this requirement waived. Cannot be taken if _ _ _ _ 299 is taken for credit.
Second Year Seminars (SYS) are speaking-intensive topic courses that build on the academic skills and habits introduced in the First Year Seminar. SYS courses engage students in a specific academic area of interest and provide them with the opportunity to reinforce, share and interpret knowledge. Students will improve their speaking, reading, research and basic information and technology skills while building the connections between scholarship and action that are required for lifelong learning. These courses will fulfill the Second Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one SYS course may be taken for credit. (CSYS)

ACFI 299 Second Year Seminar (Writing Intensive) (3 credits)
Prerequisite: _ _ _ _ 199; Open to all sophomores and juniors who have completed ENGL 101 and ENGL 102. Students with 54 or more transfer credits will have this requirement waived. Cannot be taken if _ _ _ _ 298 is taken for credit.
Second Year Seminars (SYS) are writing-intensive topic courses that build on the academic skills and habits introduced in the First Year
Seminar. SYS courses engage students in a specific academic area of interest and provide them with the opportunity to reinforce, share and interpret knowledge. Students will improve their writing, reading, research and basic information and technology skills while building the connections between scholarship and action that are required for lifelong learning. These courses will fulfill the Second Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one SYS course may be taken for credit. (CSYS)

ACFI 305  Business Law I (3 credits)  
The course is a study of the law and the judicial process including tort law, criminal law, agency law, administrative law and constitutional law. The course emphasizes the common law of contracts. Offered either semester. (CUSC)

ACFI 339  Entrepreneurial Consulting (3 credits)  
Prerequisite: Junior or senior standing  
This course will provide guidance to learn the necessary content, to practice skills and bring into play the student’s knowledge as they work with a client throughout the semester to create deliverables that bring value to the client’s business. At the end of the semester, the deliverables which have been produced on a weekly basis during the semester are included in an end of semester consulting report that is written to and for the client.

ACFI 340  Intermediate Accounting I (3 credits)  
Prerequisite: ACFI 200 or ACFI 241  
This course develops an understanding of generally accepted accounting principles, the conceptual framework and accounting information systems. Financial statements, cash, temporary investments, receivables and inventories are studied in depth. Fall semester. (CQUR)

ACFI 341  Intermediate Accounting II (3 credits)  
Prerequisite: ACFI 340  
This course is a continuation of ACFI 340. Topics covered include a continuation of inventory valuation, the acquisition, use and retirement of fixed assets, intangible assets, current and long-term liabilities, retained earnings and capital stock. Spring semester. (CQUR)

ACFI 350  Managerial Accounting (3 credits)  
Prerequisite: ACFI 100 or ACFI 241  
This course is a study of management's use of accounting information to make decisions related to planning, controlling and evaluating the organization's operations. The behavior and management costs, as well as techniques used to evaluate and control results of operations, are discussed. Topics will include cost terminology, cost behavior, cost-volume-profit analysis, job order costing, activity-based costing, segment reporting, budgeting, standards, performance measures and variance analysis, evaluation of decentralized operations and differential analysis techniques. This course is presented from the perspective of the user of accounting information rather than the preparer of such information. Analytical problem-solving techniques and the use of electronic spreadsheets will be utilized as decision-making tools. Offered either semester. (CQUR)

ACFI 385  Managerial Finance (3 credits)  
Prerequisite: ACFI 100 or ACFI 241  
This course provides an understanding of the finance function and the responsibilities of the financial manager. Concepts and tools for use in effective financial decision-making and problem-solving will be developed. Ratio analysis, funds, flow, forecasting, current assets management, budgeting, credit services, formation and cost of capital and impact of operating and financial leverages will be covered. Offered either semester. (CQUR)

ACFI 400  Honors Tutorial (3 credits each semester)  
Prerequisite: Open to Commonwealth and Departmental Honors students  
Special topics in accounting and finance will be covered in this course. Three hourly meetings weekly. Fall semester.

ACFI 401  Honors Tutorial (3 credits each semester)  
Prerequisite: Open to Commonwealth and Departmental Honors students  
Special topics in accounting and finance will be covered in this course. Three hourly meetings weekly. Spring semester.

ACFI 402  Honors Thesis (3 credits)  
Prerequisite: Open to Commonwealth and Departmental Honors students  
In this course, one-hour weekly meetings with the thesis director will culminate in an honors thesis. With the consent of the Departmental Honors Committee and the thesis director, this course may be extended into a second semester for three additional credits depending upon the scope of the project.
ACFI 406 Business Law II (3 credits)
Prerequisite: ACFI 305
This course is a study of the basic legal principles encountered in the various forms of business organizations and the study of the Uniform Commercial Code chapters on Sales, Commercial Paper, Bank Deposits and Collections and Secured Transactions. Spring semester. May be taken for graduate-level credit.

ACFI 430 Cost Accounting I (3 credits)
Prerequisite: ACFI 340
Basic cost concepts and cost procedures for manufacturing enterprises are studied in this course. Job order product costing will be emphasized. Topics will include manufacturing cost-flow concepts, procedure and controls, factory and departmental burden rates and inventory-costing methods. Spring semester. May be taken for graduate-level credit.

ACFI 445 Auditing (3 credits)
Prerequisite: ACFI 341; or may be taken concurrently with ACFI 341 with consent of instructor
The qualifications and professional code of conduct of the auditor are discussed in this course. Attention will be focused upon auditing procedures, including the preparation of audit working papers and other steps required in the course of an audit. Spring semester.

ACFI 455 International Finance (3 credits)
Prerequisite: ACFI 385
This course surveys the financial management of multinational corporations. After reviewing foreign exchange rate determinations, it then covers such timely topics as exchange risks, hedging, interest rate arbitrage, insurance and guarantee programs and international capital markets. Analysis is made of multinational capital budgeting techniques, the cost of capital and working capital management in a multinational corporate setting. Spring semester. May be taken for graduate-level credit.

ACFI 460 Advanced Accounting I (3 credits)
Prerequisite: ACFI 341
This course covers accounting for investments, business combinations, segmental reporting of business entities and not-for-profit and government accounting. Fall semester.

ACFI 465 Options and Futures Markets (3 credits)
Prerequisite: ACFI 490
This course familiarizes the student with two little-known but potentially titanic markets in the securities industry. Both options and futures are the wave of things to come. The course begins with a historical account of the origins of the two markets and then an examination of the mechanisms of both markets. Much time is spent on hedging techniques and on the application of futures contracts to the food industries and to banking and life insurance. Spring semester. May be taken for graduate-level credit.

ACFI 466 Federal Income Taxation I (3 credits)
This course provides a background in Federal Income Tax Law and the regulations of the Treasury Department. Primarily, it deals with the basic philosophy of taxation, taxable income, allowable deductions and gains and losses in sales and exchanges of property for the individual taxpayer. The development of the ability to utilize various references in dealing with tax problems will be emphasized. Tax planning will be discussed. Fall semester. May be taken for graduate-level credit.

ACFI 467 Advanced Taxation (3 credits)
Prerequisite: ACFI 466
This course examines federal income tax law and regulations applicable to partnerships, corporations and fiduciaries in greater depth. The course also covers federal gift and estate tax principles, reorganizations, personal holding companies and the accumulated earnings tax. Tax planning, including timing of transactions, appropriate forms of transactions, election of methods when alternative methods are made available under the law and other lawful means to minimize the impact of taxation will be emphasized. Procedures in the settlement of tax controversies are also included.

ACFI 470 Accounting Information Systems (3 credits)
Prerequisite: ACFI 200 or ACFI 241; and COMP 105
This course integrates accounting processes and procedures as they relate to the total information system. Students will study the design and implementation of accounting-related information systems. Topics will include internal control, design of flowcharts, data flow diagrams, computerized financial reporting and the impact of the accounting function on various elements of the organization. The purchase decision for hardware and software and related accounting considerations will also be covered. Exposure to the latest accounting software packages will be presented. May be taken for graduate-level credit.
ACFI 476  Insurance and Risk Management (3 credits)
Prerequisite: ACFI 200 or ACFI 241; and ACFI 385
This course is designed to provide an understanding of the fundamental concepts of risk management in the areas of employee benefit programs, property damage and liability exposures and other business needs for insurance. The course will also provide an overview of the risk-bearing industry, its function and importance and its relevance in today's business markets. Emphasis will be placed on the insurance contracts themselves and the rating plans available. Fall semester. May be taken for graduate-level credit.

ACFI 480  Special Topics in Accounting (3 credits)
Prerequisite: The course prerequisite may be specified depending upon the nature of the topic
In this course, special topics of current relevance in accounting will be offered from time to time. The topic to be addressed will be announced in preregistration publications. This course may be taken more than once with consent of the department chairperson.

ACFI 481  Special Topics in Finance (3 credits)
Prerequisite: The course prerequisite may be specified depending upon the nature of the topic
In this course, special topics of current relevance in finance will be offered from time to time. The topic to be addressed will be announced prior to registration. This course may be taken more than once with consent of the department chairperson.

ACFI 485  Capital Budgeting (3 credits)
Prerequisite: ACFI 200 or ACFI 241; and ACFI 385
This course explores the decision processes involved in the securing of long-term physical corporate assets, or in committed long-term intangible assets, including spreadsheet analysis of cash flows, tax implications, decision-making criteria, risk analysis and the computation of cost of capital. Spring semester. May be taken for graduate-level credit.

ACFI 486  Real Estate Investment and Finance (3 credits)
Prerequisite: ACFI 200 or ACFI 241; and ACFI 385
This course is designed to provide a comprehensive overview of the subject of real estate finance, including such topics as valuation and appraisal, market analysis, mortgages, inflation effect on real estate markets, taxes and legal considerations. This course will emphasize the fundamental theories that lead to current practice in today's market conditions and is designed for those finance majors interested in pursuing careers in real estate management, as well as those interested in broadening their understanding of this investment option. Fall semester. May be taken for graduate-level credit.

ACFI 490  Investments (3 credits)
Prerequisite: ACFI 200 or ACFI 241; and ACFI 385
This course provides an understanding of the methods and techniques utilized in analyzing various securities for investment purposes. The importance of the business cycle, economy and regulation will also be addressed. Fall semester. May be taken for graduate-level credit.

ACFI 491  Mutual Funds Management (3 credits)
Prerequisite: ACFI 385 or ACFI 505
This course is an in-depth study of the mutual fund industry. A study of mutual funds involves an understanding of the investment process, fund management, promotion and pricing strategies. This course covers the history, the current players and the future challenges of the mutual fund industry. May be taken for graduate-level credit.

ACFI 492  Intermediate Accounting III (3 credits)
Prerequisite: ACFI 341
This course is a continuation of ACFI 341. Topics covered include revenue recognition, income taxes, pensions, leases and financial reporting. Financial reporting will focus on accounting changes, disclosure requirements and the statement of cash flows. Fall Semester. May be taken for graduate-level credit.

ACFI 498  Internship in Accounting (3-15 credits)
Prerequisite: Consent of the department chairperson; formal application required
This course is a non-classroom experience designed for a limited number of junior and senior majors to complement their academic preparation. This course may be repeated for a maximum of 15 credits. Graded on a (P) Pass/(N) No Pass basis. Offered either semester.

ACFI 499  Directed Study in Accounting (1-3 credits)
Prerequisite: Consent of the department chairperson; formal application required
Directed study is open to junior and senior majors who have demonstrated critical and analytical abilities in their studies and who wish to pursue a project independently. This course may be taken twice for a maximum of six credits. Graded on a (P) Pass/(N) No Pass basis. Offered either semester.
ACFI 500  Foundations of Financial and Managerial Accounting (3 credits)
This course provides a general introduction to financial reporting issues and managerial accounting practices to prepare students for upper-level graduate courses. Topics covered include introduction to financial statements (income statement, balance sheet and the statement of cash flows) as well as ratio analysis and selected managerial accounting topics. Material will be presented from a user-orientation perspective. Topics will be covered with an emphasis on breadth rather than depth of coverage.

ACFI 501  Foundations of Corporate Finance (3 credits)
Prerequisite: ACFI 500 and ECON 501
The concepts of financial planning, analysis, forecasting and control are integrated within the course utilizing cases and problems. Emphasis is on financial decision making from the perspective of the business firm. Topics covered include time value of money, ratio analysis, capital budgeting, risk, cost of capital, valuation and related financial topics.

ACFI 503  Directed Study (1-3 credits)
Prerequisite: Consent of the department chairperson; formal application required
Directed study is designed for the graduate student who desires to study selected topics in a specific field. For details, consult the paragraph titled “Directed or Independent Study” in the “College of Graduate Studies” section of this catalog. This course may be repeated for a maximum of six credits.

ACFI 506  Business Law II (3 credits)
Prerequisite: ACFI 305
This course is a study of the basic legal principles encountered in the various forms of business organizations and the study of the Uniform Commercial Code chapters on sales, commercial paper, bank deposits, and collections and secured transactions. Offered spring semester.

ACFI 530  Accounting Analysis for Decision Making (3 credits)
Prerequisite: ACFI 340 and ACFI 350
Basic cost concepts and cost procedures for manufacturing enterprises are studied in this course. Job order product costing will be emphasized. Topics will include manufacturing cost-flow concepts, procedure and controls, factory and departmental burden rates and inventory-costing methods.

ACFI 545  Auditing (3 credits)
Prerequisite: ACFI 341
The qualifications and professional code of conduct of the auditor are discussed in this course. Attention is focused upon auditing procedures including the preparation of audit working papers and other steps required in the course of an audit. Spring semester.

ACFI 546  Internal Audit and Control (3 credits)
Prerequisite: ACFI 341
The course covers the internal audit profession, the professional code of conduct of the auditors, the role of internal audit in business and the practices and procedures employed in internal auditing. It includes enterprise risk management, internal control management and the models used in business.

ACFI 550  Accounting for Managerial Decision Making (1.5 credits)
Prerequisite: ACFI 500
This course focuses on the study of management's use of accounting information to make decisions related to planning, controlling and evaluating the organization's operations. Utilizing case studies and lectures, covered topics include contemporary management accounting practices and techniques, product costing, cost behavior, cost/benefit analysis, cost-volume-profit analysis, operations budgeting, responsibility accounting, segment reporting, activity-based costing and just-in-time production systems.

ACFI 551  Financial Management (1.5 credits)
Prerequisite: ACFI 501
This course involves the study of the techniques of financial decision making within corporations. Lectures, case studies, problem solving and readings focus on risk analysis, cost-of-capital concepts, money markets, capital markets and selected topics which promote the understanding of modern financial management.

ACFI 560  Advanced Accounting (3 credits)
Prerequisite: ACFI 341
This course covers accounting for investments, business combinations, segmental reporting of business entities and not-for-profit and government accounting. Fall semester.
ACFI 566  Federal Income Taxation I (3 credits)
This course provides a background in Federal Income Tax Law and the regulations of the Treasury Department. Primarily, it deals with the basic philosophy of taxation, taxable income, allowable deductions and gains and losses in sales and exchanges of property for the individual taxpayer. The development of the ability to utilize various references in dealing with tax problems will be emphasized. Tax planning will be discussed.

ACFI 567  Corporate Taxation (3 credits)
Prerequisite: ACFI 566
This course examines federal income tax law and regulations, with emphasis on topics applicable to partnerships, corporations, “S” corporations and fiduciaries in greater depth. Federal gift and estate tax principles, liquidations and reorganizations are also covered. Tax planning and tax research are emphasized, including timing of transactions, appropriate forms of structuring transactions, election of alternative methods and other lawful means to minimize the impact of taxation.

ACFI 570  Financial Information Systems Control (3 credits)
Prerequisite: ACFI 200 or ACFI 241; and COMP 105
This course integrates business processes and procedures as they relate to an organization’s total information system. Students will study the design and implementation of information systems and the controls required to maintain the integrity of business information. Topics will include information systems, enterprise systems, e-Business systems, design of flowcharts, data flow diagrams, database management, internal control, computerized financial reporting and the impact of financial reporting on various elements of the organization. The purchase decision for hardware and software and exposure to various reporting packages will also be covered.

ACFI 580  Special Topics in Accounting (3 credits)
Prerequisite: The course prerequisite may be specified depending upon the nature of the topic
In this course, special topics of current relevance in accounting will be offered from time to time. The topic to be addressed will be announced prior to registration. This course may be taken more than once with consent of the department chairperson.

ACFI 581  Special Topics in Finance (3 credits)
Prerequisite: The course prerequisite may be specified depending upon the nature of the topic
In this course, special topics of current relevance in finance will be offered from time to time. The topic to be addressed will be announced in preregistration publications. This course may be taken more than once with consent of the department chairperson.

ACFI 592  Advanced Financial Reporting (3 credits)
Prerequisite: ACFI 341
Topics covered in this course include revenue recognition, income taxes, pensions, leases and financial reporting. Financial reporting will focus on accounting changes, disclosure requirements and the statement of cash flows.

ACFI 593  Financial Statement Analysis (3 credits)
Prerequisite: ACFI 385 or ACFI 505
This course covers current techniques and applications of financial statement analysis; exposes students to the contemporary financial reporting environment and current reporting practices of companies; and analyzes real-life cases to foster an understanding of the economic and strategic information conveyed in financial reports and related disclosure issues.

ACFI 595  Accounting Seminar (Capstone) (3 credits)
Prerequisite: ACFI 341 and completion of 18 credits of graduate course work
This capstone course develops an integrated understanding of generally accepted accounting principles along with the underlying concepts of accounting conventions. Emphasis is placed on current developments, recent FASB pronouncements, and the role of the Securities Exchange Commission. Guest speakers augment student presentations and seminar discussions.

Accounting and Finance: Other Approved Courses

ACFI 240  Principles of Accounting I (3 credits)
This course involves the preparation and analysis of accounting statements. Areas covered in detail include cash, receivables, merchandise accounting, internal control, inventory valuation and corporate financial reporting. Offered either semester. (CQUR)

ACFI 241  Principles of Accounting II (3 credits)
Prerequisite: ACFI 240
This course is a continuation of Accounting I. Areas covered include operating assets, property plant and equipment, current liabilities, long term liabilities, stockholder's equity and financial statement analysis. Offered either semester. (CQUR)
ACFI 399  Special Topics in Accounting/Finance (3 credits)
Special topics will be offered in accounting, finance and related subjects. This course may be taken more than once for different topics.

ACFI 431  Cost Accounting II (3 credits)
Prerequisite: ACFI 341
This course is a continuation of Cost Accounting I. Additional study of process cost systems, in-depth study variance analysis, in-depth study of performance measurement, transfer pricing, accounting for by-products and spoilage. The course will also introduce capital budget concepts.

ACFI 505  Accounting and Finance for Managers (3 credits)
This course presents the fundamentals of accounting and finance to graduate students who have not previously studied these subjects or who need a review of them. Credit cannot be applied toward a graduate degree program.

ACFI 510  Accounting for School Business Managers (3 credits)
The intent of this course is to deepen the student's understanding and appreciation for the role that accounting in not-for-profit/municipal settings plays in the daily running of school systems and individual schools. Accounting principles, basics and uses in the public school financing arena will be covered as well as liabilities, inventories, payroll, audits and the state school accounting systems with its year-end reports.

ANTHROPOLOGY

ANTH 100  Introduction to Cultural Anthropology (3 credits)
This course introduces basic anthropological concepts and methods of cultural analysis. The problems of ethnocentrism and human cultural variability in human societies of different times and places will be studied. Offered either semester. (CGCL; CMCL; CSOC)

ANTH 101  Biological Anthropology (3 credits)
This course covers the following areas: divisions of anthropology, theories and principles of evolution, primate and hominid evolution and behavior, origins of hominid physical and cultural development and concepts of racial variation. Offered either semester. (CSOC)

ANTH 103  Introduction to Archaeology (3 credits)
This course examines research methods, systems of data recording, and analysis and reconstruction of cultural lifeways of past cultures. The conceptual bases of the study of the past are explored through material culture. Offered either semester. (Formerly ANTH 302) (CSOC)

ANTH 110  Introduction to Folklore (3 credits)
This course explores the meanings and subdivisions of folklore: myth, folktale, proverb, riddles and folklife. It covers the analysis of story elements, major folklore areas and the role of folklore and folklife in society and culture. Offered either semester. (CGCL; CSOC; CWRT)

ANTH 111  Myth and Culture (3 credits)
This course introduces the cross-cultural approach to world mythology. Myths of our own and other cultures will be analyzed using several theoretical approaches. Myth will be examined as a fundamental human function, necessary for the well-being of cultures. Offered either semester. (CGCL; CSOC; CWRT)

ANTH 115  Anthropology of Race, Class, and Gender (3 credits)
This course will introduce students to how concepts of race, class, and gender have been constructed cross-culturally. Students will use cross-cultural ethnographic examples from egalitarian, ranked and stratified societies to examine how systems of social inequality based on race, class and gender are created and maintained; how these social categories are used to promote group loyalties and allegiances; and how global community building can occur across social divides of gender, social class, race, ethnicity and/or nationhood. Offered either semester. (CMCL; CSOC)

ANTH 120  First Nations: Global Indigenous People (3 credits)
This course will introduce students to First Nations or indigenous people globally. Students will investigate past and contemporary native indigenous ways of life, using examples from Native North and South America, Australia, Africa and the Pacific Islands, among others. Students will investigate issues of indigenous cultural survival, the current political and economic status of indigenous communities, issues of self-determination, global human rights and pan-tribalism. Offered either semester (CGCL; CSOC)
ANTH 130  Introduction to Primates (3 credits)
This course will provide an introduction to variations among modern nonhuman primates -- monkeys, apes and prosimians. The course will examine the social behavior of these animals, drawing links to human behavior that will allow an investigation into primate similarities and differences, and where humans are unique. The origins of cultural behavior, along with diet and morphology, will be explored within an ecological context. The nature of learned behavior, dependence on social relationships for survival, competition for resources and the importance of cultural understanding to achieve goals will be major themes. Evolutionary theory and conservation will provide much of the framework for our studies. Offered spring semester. (CSOC; CSPI starting spring 2011)

ANTH 199  First Year Seminar (3 credits)
Prerequisite: Open to all freshmen with a writing placement score of 3 or above or a SAT score of 500 or above or who have completed ENGL 101. Students with 24 or more transfer credits will have this requirement waived.
First Year Seminars (FYS) are writing-intensive topic courses that introduce students to academic thought, discourse and practices. FYS courses prepare and orient students toward productive and fulfilling college careers by actively engaging them in a specific academic area of interest. Students will improve their writing, reading, research and basic information and technology skills while learning to work both collaboratively and independently. These courses will fulfill the First Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one FYS course may be taken for credit. (CFYS)

ANTH 204  Global Human Issues (3 credits)
This interdisciplinary course treats major world problems with particular emphasis upon those faced by non-Western peoples. The interdependence between economically developed and underdeveloped parts of the world will be explored according to such themes as collective versus individual good, short-versus long-term planning and cooperation versus competition. Offered either semester. (Formerly ANTH 104) (CGCL; CMCL; CSOC)

ANTH 206  Native Cultures of North America (3 credits)
This cross-cultural course studies the tribal cultures of the United States, Canada and Mexico. Emphasis will be placed on developing an understanding of Native American cultural systems in their traditional settings and on the current status of Native American interaction with government policies and attitudes. Either semester. (CGCL; CMCL; CSOC)

ANTH 208  Anthropology of Women (3 credits)
This course will investigate the relative status of women cross-culturally in a range of non-Western settings, including hunter-gatherer bands, horticultural societies, peasantry, nomadic pastoralists and contemporary industrial societies. Women will be examined as they relate to economic resources, political power and authority, kin and non-kin and in religion, myth and lore. Students will analyze conceptually and through cross-cultural data what is meant by sex roles, how they vary cross-culturally and how they are negotiated and maintained. Either semester. (CGCL; CMCL; CSOC)

ANTH 209  Peoples and Cultures of Africa (3 credits)
A survey of the multiplicity of ways in which contemporary societies, rural and urban, arrange their ways of life in a rapidly changing Africa. Either semester. (CGCL; CMCL; CSOC)

ANTH 212  Africa Through Film (3 credits)
This course examines current socio-cultural, political and economic issues pertaining to Africa and its people using documentary films, video clips, ethnographies and other visual media. Emphasis will be on the use of contemporary media to address important issues pertaining to African people's lives, such as the HIV/AIDS pandemic, poverty, social problems, community development, economic resources, genocide, conflicts and other forms of violence, climate change and politics. In this course, visual media will be used as a tool to educate students on local and global issues relevant to the African continent. Offered every other year. (CGCL; CMCL; CSOC; CWRT)

ANTH 213  Latin American Peoples and Cultures (3 credits)
This course will investigate the culture, history and development of selected Latin American regions and their contemporary relations with the United States. Mexico/Guatemala and Central and South America will be studied by means of ethnographic and cross-cultural documents of the past and present which reveal changing conditions of society, land ownership, ethnicity and political allegiance. Either semester. (CGCL; CMCL; CSOC) Addenda: This course has been changed effective spring 2012. See the Catalog Addenda section of this publication for detailed information.

ANTH 215  The Caribbean (3 credits)
This course examines the creation of Caribbean cultures and societies over 500 years of European conquest and colonization, the impact of the slave trade, emancipation, independence movements and postcolonial state formation. The course explores everyday life in contemporary Caribbean societies considering the intersections of nationality, class, ethnicity, race, gender and religion on the formation of diverse and complex cultures. Fall semester. (CGCL; CMCL; CSOC; CWRT)
ANth 216  Peoples and Cultures of the Middle East (3 credits)
The Middle East was the cradle of the world's earliest civilizations and has made immense contributions to the development of agriculture, pastoralism, urbanization and organized religion. Today it remains an extraordinarily important and volatile crossroads for world culture. The course will examine both ancient and modern cultures within this diverse region from a cross-cultural perspective. The study will include kinship patterns, social organization, political structures, subsistence strategies and belief systems. The course will pay particular attention to the role of modern peoples in shaping the world stage, both in reaction to and in harmony with the introduction of Western ideologies and economics. Either semester. (CGCL; CMCL; CSOC; CSPI)

ANth 224  Anthropology of South Asia (3 credits)
Anthropology of South Asia is a general introductory course that is designed for both anthropology majors and non-majors. This course introduces students to the physical geography of South Asia, and explores the various key aspects of South Asian traditional culture, social systems and transformations, including the Diaspora, and the spread of popular culture outside South Asia. (CGCL; CSOC)

ANth 298  Second Year Seminar (Speaking Intensive) (3 credits)
Prerequisite: ANTH 100; Open to all sophomores and juniors who have completed ENGL 101, and the speaking skills requirement. Students with 54 or more transfer credits will have this requirement waived. Cannot be taken if ANTH 299 is taken for credit. Second Year Seminars (SYS) are speaking-intensive topic courses that build on the academic skills and habits introduced in the First Year Seminar. SYS courses engage students in a specific academic area of interest and provide them with the opportunity to reinforce, share and interpret knowledge. Students will improve their speaking, reading, research and basic information and technology skills while building the connections between scholarship and action that are required for lifelong learning. These courses will fulfill the Second Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one SYS course may be taken for credit. (CSYS)

ANth 299  Second Year Seminar (Writing Intensive) (3 credits)
Prerequisite: ANTH 100; Open to all sophomores and juniors who have completed ENGL 101 and ENGL 102. Students with 54 or more transfer credits will have this requirement waived. Cannot be taken if ANTH 298 is taken for credit. Second Year Seminars (SYS) are writing-intensive topic courses that build on the academic skills and habits introduced in the First Year Seminar. SYS courses engage students in a specific academic area of interest and provide them with the opportunity to reinforce, share and interpret knowledge. Students will improve their writing, reading, research and basic information and technology skills while building the connections between scholarship and action that are required for lifelong learning. These courses will fulfill the Second Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one SYS course may be taken for credit. (CSYS)

ANth 303  Archaeological Field Excavation in Prehistoric Sites in New England (3-6 credits)
This course provides intensive training in the practical skills of field archaeology. Direction in site survey, excavation tactics and strategy, fieldwork supervision, methods of sampling and on-site analysis is given. The course includes an introduction to laboratory work, covering topics such as cataloging, recognizing lithic materials, metric measurement and flotation of organic samples. This course may be repeated up to nine credits. Offered every summer. (Formerly ANTH 403)

ANth 305  Culture Change (3 credits)
Prerequisite: ANTH 100 or ANTH 101 or ANTH 103 or consent of instructor
This course focuses on the processes of culture change, intentioned and unintentioned, internal and external. It will explore reaction strategies of cultures toward imminent change. The course concludes with a consideration of how models can be applied to producing non-destructive, non-exploitative culture change. Offered once every three years. (Formerly ANTH 205) (CGCL; CSOC; CWRT)

ANth 306  Urban Anthropology (3 credits)
Prerequisite: ANTH 100 or consent of instructor
This course will acquaint students with the anthropological study of cities and city life. Students will review recent anthropological studies of the urban environment using cross-cultural and historic data. (CMCL; CSOC)

ANth 307  Anthropology of Religion (3 credits)
Prerequisite: ANTH 100 or ANTH 111 or consent of instructor
This course covers the origins and development of religion in society; myth, ritual, magic and religious specialists: Australian, African and American Indian. Offered alternate years, fall semester. (CGCL; CSOC; CWRT)

ANth 308  Anthropology of Education (3 credits)
Prerequisite: ANTH 100 or consent of instructor
This course introduces students to anthropological approaches to analyzing and understanding learning, schools and education systems cross-culturally. Students investigate schools as agents of child socialization and enculturation; compare U.S. schools, education systems,
and school cultures to learning, schools and education in other societies; and examine how educational institutions relate to other aspects of culture. Cross-cultural data include indigenous and contemporary Native North America, Africa, Japan, Germany and other settings globally. Offered alternate years. (Formerly ANTH 415) (CGCL; CMCL; CSOC; CWRT)

ANTH 309 Anthropology of Art (3 credits)
Prerequisite: ANTH 100 or ANTH 110 or consent of instructor
This course investigates the forms, functions, meanings and aesthetics of art cross-culturally. It will be critical of the modern western concept of “art for art’s sake” and discuss ways that socio-cultural, political and economic factors frame the contexts and dynamics of art production across the world. The role of artists in society and aesthetic creativity will also be examined from a cross-cultural perspective. Discussion begins with the arts of “traditional” societies drawing from examples from Africa, Oceania, Asia and the Americas. The course will then examine how these arts have been impacted by colonialism, capitalism and the emergence of new nation-states. Topics include: ethnic, tourist and national arts, culture revitalization, issues of authenticity and the emergence of a global art world with its power relations. Offered every three years. (CGCL; CSOC)

ANTH 314 Women in Myth and Lore (3 credits)
Prerequisite: ANTH 100 or ANTH 110 or ANTH 111 or INTD 230 or consent of instructor
This course will investigate females and the feminine in mythologies and folklore traditions cross-culturally. Native indigenous (African, Australian, South Pacific, Native American), classical (Greek, Egyptian, Roman) and Judeo-Christian mythologies will be analyzed, compared and contrasted. Students will explore mythology and story-telling traditions as they pertain to women and gender cross-culturally. Offered every other semester. (CGCL; CSOC)

ANTH 315 Ethnic Experience in America (3 credits)
Prerequisite: ANTH 100 or SOCI 102 or consent of instructor
This course considers the role of ethnic background in personal and social relationships. The varying interpretations of ethnic culture -- its formation and growth in America -- are examined while each student looks into his or her personal heritage and the role of tradition in contemporary life. Once yearly. (CMCL; CSOC)

ANTH 319 Contemporary Native Americans (3 credits)
Prerequisite: ANTH 100 or ANTH 206 or consent of instructor
This course will explore the problems faced by native or indigenous peoples in the United States today. It will focus on issues of land, tribal recognition, poverty, treatment by government agencies and multinational corporations and ethnic discrimination. It will also address the ongoing changes in native responses including the American Indian Movement, the revival of native spiritual life and the problem/opportunity of casino gambling. Offered alternate years. (CGCL; CMCL; CSOC)

ANTH 322 War, Peace and Culture (3 credits)
Prerequisite: Any 100- or 200-level anthropology course or consent of instructor
This course proceeds from the premise that while conflict of some sort is inevitable within and among human cultures, war is not. By investigating sources of conflict violence and conflict resolution strategies in a variety of cultures, the course creates an opportunity to study war, violence and conflict cross-culturally – and the possibilities of peace. Offered alternate years, spring semester. (CGCL; CMCL; CSOC)

ANTH 326 African Ethnomedicine (3 credits)
This course examines the diverse medical systems existing on the African continent and their crucial roles in alleviating suffering in the era of globalization. Topics to be addressed include African medical practices, indigenous knowledge and beliefs, and the rich pharmacopeia that people rely on to prevent and treat ill health. Students will also be introduced to other great medical traditions, such as Chinese, Indian, Islamic, Christian and Roman medicine and biomedicine including complementary and alternative medicines. Students will critically analyze the intersections of medical traditions, differential access to health care, and the effects of wealth and poverty on human well-being. (CGCL; CMCL; CSOC)

ANTH 328 Archaeology of North America (3 credits)
Prerequisite: ANTH 103 or consent of instructor
The development of prehistoric and proto-historic Native American cultures. Cultural dynamics of hunting-gathering and maize agriculture. Theories of the peopling of the continent will be evaluated. Offered alternate years, fall semester. (CGCL; CSOC)

ANTH 330 Medical Anthropology (3 credits)
Prerequisite: Any 100- or 200-level anthropology course or consent of instructor
The course concentrates on health, illness and healing in cross-cultural perspective. It will examine ways in which culture mediates ideas of physical well-being, and will be aimed at dispelling belief in the absolute truth of medical dogma, teaching students to think outside their own cultural biases. It begins with a consideration of body image in a range of different cultures and then proceeds to the varying...
rationales for normal function and for dysfunction. The healing process as ritual and as scientific procedure, including the theory and practice of healing in different cultures, figures into the course as does the training and outlook of healers – doctors, priests, shamans, nurses, midwives and others. Finally, the medical systems of several cultures, ancient and modern, industrialized and preindustrial, are compared. Offered alternate years. (CGCL; CMCL; CSOC; CWRT)

**ANTH 331 Political Anthropology (3 credits)**
**Prerequisite: ANTH 100 or consent of instructor**
This course examines political processes in state and “stateless” societies, focusing on the development of political forms in foraging, pastoral, agricultural and industrial societies, mainly in the developing world. The idea that “politics” exists as a set of practices tied to power that can be observed through anthropological methods will be addressed, along with the development of the subfield of political anthropology itself. Offered alternate years, fall semester. (CGCL; CMCL; CSOC)

**ANTH 332 Practicum in Field Archaeology (1-3 credits)**
**Prerequisite: ANTH 103 (may be taken concurrently) or ANTH 303 or consent of instructor**
This course provides experiential training in excavation techniques, field recording, and primary cataloging and analysis of archaeological materials. Offered fall semester.

**ANTH 340 Myths and Peoples of the Ancient Near East (3 credits)**
**Prerequisite: ANTH 100 or ANTH 110 or ANTH 111 or ANTH 307 or consent of instructor**
This course will explore the dimensions of myth as they relate to the cultural life of the peoples of the Ancient Near East: the Egyptians, the Sumerians, the Babylonians and Assyrians, the Hittites, the Phoenicians and the Hebrews. Emphasis will be placed on understanding the context out of which the myths arose, and the ways in which they both described and conditioned the cultural realities to which they related. Offered every other year. (CGCL; CSOC; CWRT)

**ANTH 355 Anthropological Study Tour (3 credits)**
**Prerequisite: Consent of instructor**
(Country to be determined) This course will offer students a first-hand, supervised cross-cultural travel and study experience from an anthropological perspective. Students will participate in lectures, site visits, research and other academic experiences, including pre- and post-travel activities, as appropriate. Students will learn aspects of local society and culture, such as visual and performing arts, religious traditions, political organization, economy, subsistence activities, folklore and family life. This course may be taken twice for anthropology credit, for travel to different study tour sites. Offered annually. (CSOC)

**ANTH 390 Anthropology Colloquium (1 credit)**
**Prerequisite: ANTH 100 and ANTH 101 and ANTH 103; or consent of instructor**
This course is a participation-based colloquium. Topics will vary and focus on different issues in anthropology.

**ANTH 399 Special Topics in Anthropology (3 credits)**
**Prerequisite: The course prerequisite may be specified depending upon the nature of the topic.**
Various special topics of current interest in anthropology will be offered from time to time. Topics will be announced prior to registration. This course may be taken more than once for different topics, but only six credits will be counted toward the first 30 hours of the anthropology major. (CSOC)

**ANTH 400 Seminar: Anthropological Theory (3 credits)**
**Prerequisite: Senior standing or consent of instructor or department chairperson**
This course is a survey of the foundations of cultural and archaeological theory, including cultural evolutionism, structuralism, American historical-particularism, British functionalism and structural-functionalism, French structuralism and current directions in American, European and Third World anthropological thought. Theories of archaeology will also be examined, including traditional evolutionary perspectives, the New Archaeology and contemporary critiques, drawing upon social systems analysis. Every third semester. May be taken for graduate-level credit. (CWRM)

**ANTH 401 Research Methods in Anthropology (3 credits)**
**Prerequisite: ANTH 100; and either ANTH 101 or ANTH 103; or consent of instructor**
This course focuses on research methods used in anthropology. Students will be introduced to both qualitative and quantitative ethnographic data collection techniques. Qualitative research methods include observation, interviewing and text data analysis and report writing. Students will apply these research methods through a series of short field and written exercises. Fall semester.

**ANTH 404 Seminar: Culture and Consciousness (3 credits)**
**Prerequisite: ANTH 100 or ANTH 110 or ANTH 111 or consent of instructor**
This course is an experiment in the study of how consciousness, and particularly the idea of the unconscious, is construed and constructed in various cultural contexts. We will work towards an understanding of consciousness in cultural context as a means of understanding
cultures at their deepest levels, including our own. An important component of the course will be class dream-work sharing sessions. Offered alternate spring semesters. (CGCL; CSOC; CWRT)

**ANTH 405 Forensic Anthropology (3 credits)**
*Prerequisite: ANTH 101 or ANTH 103 or BIOL 100 or BIOL 121 or consent of instructor*
This course will introduce students to the methods and approaches of the forensic anthropologist. Extensive time will be spent on becoming familiar with the human skeleton – the most important tool in forensic anthropology. In addition, the many legal and ethical issues that arise when working with human remains will be examined. This class will include lectures and discussion. Offered annually. May be taken for graduate-level credit. (CSOC)

**ANTH 406 Seminar: Human Evolution (3 credits)**
*Prerequisite: ANTH 101 or ANTH 103 or BIOL 121 or BIOL 122 or consent of instructor*
This course addresses fundamental principles of human evolution, beginning with a review of evolutionary theory, its history, processes and how genetics has changed the way evolution is viewed. The course will examine the fossil evidence for human evolution, physical characteristics, variation among specimens, and how the different specimens are related to each other. Adaptation will be a unifying theme throughout the course. Extensive use will be made of the physical anthropology laboratory. Offered alternate years. May be taken for graduate-level credit. (CSOC)

**ANTH 410 Public Archaeology (3 credits)**
*Prerequisite: ANTH 103 and at least 2 credits in ANTH 332 or ANTH 303 or consent of instructor*
An introduction to public archaeology, its history of development. Emphasis will be placed on the basic knowledge and training necessary for careers in contract archaeology and cultural resource management: 1) to introduce students to the history of the development of public archaeology; 2) to study the federal, state and local legislation protecting archaeological resources; 3) to provide administrative training for doing contract archaeology – contract and research proposal development, report writing, Environmental Impact Statement interpretation and to provide a basic background for cultural resource management careers. Offered alternate years. May be taken for graduate-level credit. (CGCL; CMCL; CSOC)

**ANTH 417 Seminar: She/He “Two Spirits” Gender Cross-Culturally (3 credits)**
*Prerequisite: ANTH 100 or INTD 230 or consent of instructor*
This course introduces students to cross-cultural constructions of gender. Gender and sexuality are differentiated and students explore how gender is a cultural construct which varies cross-culturally. Students will explore a range of gender expressions, including homosexual males, lesbians, transgendered, bisexuals and Native American Two Spirits. Issues of masculinity, femininity and alternate genders will be examined in Euro-American, Latin American, Asian, Native American and other cross-cultural settings. Offered alternate years. May be taken for graduate-level credit. (CGCL; CMCL; CSOC)

**ANTH 420 Visual Anthropology (3 credits)**
*Prerequisite: ANTH 100 or consent of instructor*
This course is grounded in interpretive and semiotic theories and examines the uses of images for cultural documentation, interpretation and analysis. Students will examine the roles of objectivity, ideology and perspective in the production and interpretation of visual images in motion and still photography. Emphasis will be on how visual images represent the cultural, vis-à-vis gender, social class, ethnicity and socio-cultural context. Offered alternate years. May be taken for graduate-level credit. (CMCL; CSOC)

**ANTH 426 Seminar: New England Ethnic and Regional Communities (3 credits)**
*Prerequisite: ANTH 100 or SOCI 102; and ANTH 315 or SOCI 315; or consent of instructor*
This course will explore theories of ethnic persistence and change as they pertain to New England's ethnic and social communities, such as Cape Verdeans, Asians, African-Americans, Italians, Jews and homosexuals. Cultural traditions, social institutions and changing beliefs of New England's ethnic and regional communities will be examined through critical analyses of relevant cultural materials, including sociological data, folklore, oral traditions, celebrations and the media. Offered every third year. May be taken for graduate-level credit. (CMCL; CSOC; CWRT)

**ANTH 435 Seminar: Global Feminism (3 credits)**
*Prerequisite: One of the following: ANTH 100 or ANTH 204 or ANTH 208 or SOCI 102 or WMST 240; or consent of instructor*
This course will explore the range and content of women's activism, agency and feminist consciousness-raising globally around a range of issues, including education, health care, sexual politics, political participation, the division of labor and labor force participation, self-determination and participation in local feminist movements. Students will explore women's feminism and activism globally, the relationship of local cultural practices to women's and feminist movements, and what women are doing to work as agents of self-empowerment and self-determination globally. Offered every third year. May be taken for graduate-level credit. (CGCL; CMCL; CSOC)

**ANTH 485 Honors Thesis (3 credits)**
Prerequisite: Open to Commonwealth and Departmental Honors students and senior status
With the consent of the Departmental Honors Committee and the thesis director, this course may be extended into a second semester for three additional credits depending on the scope of the project. The Departmental Honors Committee will determine if the final version of the thesis qualifies the student to graduate with honors.

ANTH 498 Practicum in Anthropology (3-15 credits)
Prerequisite: Junior or senior standing; consent of department; formal application required
Students will undertake supervised anthropology projects using anthropological knowledge and methods to solve human social problems in real world settings. Students may work in organizations related to any of the anthropology subfields, such educational agencies/schools, museums, zoos, social service agencies, legal aid, civic and government organizations, regional and national NGOs, community organizing agencies, women’s centers, research organizations and other agencies. Students will be supervised in the agency and mentored by the instructor. This course may be repeated for a maximum of 15 credits.

ANTH 499 Directed Study in Anthropology (1-3 credits)
Prerequisite: Consent of the department; formal application required
Directed study is open to juniors and seniors who have demonstrated critical and analytical abilities in their studies and who wish to pursue a project independently. This course may be taken twice for a maximum of six credits.

ANTH 502 Research (3 or 6 credits)
Prerequisite: Consent of the department; formal application required
Original research is undertaken by the graduate student in their field. For details, consult the paragraph titled “Directed or Independent Study” in the “School of Graduate Studies” section of this catalog. This course may be repeated for a maximum of six credits.

ANTH 503 Directed Study (1-3 credits)
Prerequisite: Consent of the department; formal application required
Directed study is designed for the graduate student who desires to study selected topics in a specific field. For details, consult the paragraph titled “Directed or Independent Study” in the “School of Graduate Studies” section of this catalog. This course may be repeated for a maximum of six credits.

ANTH 504 Archaeological Field Excavation (3-6 credits)
This course provides intensive training in the practical skills of field archaeology. Direction in site survey, excavation tactics and strategy, fieldwork supervision, methods of sampling and on-site analysis is given. The course includes an introduction to laboratory work. Topics such as cataloging, recognizing lithic materials, metric measurement and flotation of organic samples will be covered. This course is may be repeated up to nine credits. Offered every summer.

ANTH 515 CD-ROM: Teaching in Diverse Classrooms (4 credits)
This course will introduce classroom teachers to theories, ideas, and content that will enable them to be responsive to a multicultural classroom. The aim of this course is to impart knowledge and facilitate pedagogy that is multicultural, critical and responsive to multicultural students and their communities. Students will learn about issues of power and difference both within school settings and the larger society. Students will become sensitive to issues of power, inequality, and cultural difference within the classroom and learn how to implement pedagogies that are culturally responsive.

ANTH 555 Anthropology Study Tour (Country to be determined) (3 credits)
Prerequisite: Consent of instructor
This course will offer students a firsthand, supervised cross-cultural travel and study experience from an anthropological perspective. Students will participate in lectures, site visits, research and other academic experiences, including pre- and post-travel activities, as appropriate. Students will learn aspects of local society and culture, such as visual and performing arts, religious traditions, political organization, economy, subsistence activities, folklore and family life. This course may be taken twice for credit for travel to different study tour sites.

ARABIC

LAAR 101 Elementary Arabic I (3 credits)
An introduction to elementary syntactic, semantic, phonetic and paralinguistic structures is offered. Pertinent everyday cultural concepts are discussed. Relevant comparison and contrast with the native language is treated. Functional communication in the second language in a controlled environment is the principal objective of the course. Note: See the “Departmental Foreign Language Policy” in the “Foreign Languages” section of this catalog. (CGCL; CHUM)
LAAR 102  Elementary Arabic II (3 credits)
Prerequisite: LAAR 102
The further study of elementary syntactic, semantic, phonetic and paralinguistic structures is offered. Pertinent everyday cultural concepts are discussed. Relevant comparison and contrast with the native language is treated. Functional communication in the second language in a controlled environment is the principal objective of the course. Note: See the “Departmental Foreign Language Policy” in the “Foreign Languages” section of this catalog. (CGCL; CHUM)

LAAR 151  Intermediate Arabic (3 credits)
Prerequisite: LAAR 102
This course is a review of Arabic grammar with emphasis given to reading, writing, listening and speaking; systematic laboratory practice; and an introduction to aspects of Arabic culture. This course is conducted in Arabic. (CGCL; CHUM)

LAAR 199  First Year Seminar (3 credits)
Prerequisite: Open to all freshmen with a writing placement score of 3 or above or a SAT score of 500 or above. Students with 24 or more transfer credits will have this requirement waived.
First Year Seminars (FYS) are writing-intensive, topic courses that introduce students to academic thought, discourse and practices. FYS courses prepare and orient students toward productive and fulfilling college careers by actively engaging them in a specific academic area of interest. Students will improve their writing, reading, research and basic information and technology skills while learning to work both collaboratively and independently. These courses will fulfill the First Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one FYS course may be taken for credit. (CFYS)

LAAR 298  Second Year Seminar (Speaking Intensive) (3 credits)
Prerequisite: _ _ _ _199; Open to all sophomores and juniors who have completed ENGL 101, and the speaking skills requirement. Students with 54 or more transfer credits will have this requirement waived. Cannot be taken if _ _ _ _299 is taken for credit.
Second Year Seminars (SYS) are speaking-intensive, topic courses that build on the academic skills and habits introduced in the First Year Seminar. SYS courses engage students in a specific academic area of interest and provide them with the opportunity to reinforce, share and interpret knowledge. Students will improve their speaking, reading, research and basic information and technology skills while building the connections between scholarship and action that are required for lifelong learning. These courses will fulfill the Second Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one SYS course may be taken for credit. (CSYS)

LAAR 299  Second Year Seminar (Writing Intensive) (3 credits)
Prerequisite: _ _ _ _199; Open to all sophomores and juniors who have completed ENGL 101 and ENGL 102. Students with 54 or more transfer credits will have this requirement waived. Cannot be taken if _ _ _ _298 is taken for credit.
Second Year Seminars (SYS) are writing-intensive, topic courses that build on the academic skills and habits introduced in the First Year Seminar. SYS courses engage students in a specific academic area of interest and provide them with the opportunity to reinforce, share and interpret knowledge. Students will improve their writing, reading, research and basic information and technology skills while building the connections between scholarship and action that are required for lifelong learning. These courses will fulfill the Second Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one SYS course may be taken for credit. (CSYS)

Arabic: Other Approved Courses

LAAR 172  Business Arabic (3 credits)
Prerequisite: LAAR 151
This course is an introduction to the language of business and professional careers and pertinent aspects of modern Arabic society and culture. Emphasis is placed on the development of comprehension and communication business skills.

LAAR 211  Arabic Literature in Translation (3 credits)
Major literary texts from the pre-Islamic period to the present will be treated. This general introduction is set against relevant political, religious and cultural backgrounds. Conducted in Arabic.

- ART HISTORY

ARTH 101  Introduction to Art (3 credits)
The emphasis of this course is on painting, sculpture and architecture. Topics include aesthetic principles, artistic styles and their historical contexts, analysis of media and technical processes. A museum visit is assigned. This course does not satisfy art major elective. Either semester. (CFPA; CGCL)

ARTh 103 Survey of Ancient and Medieval Art (3 credits)
This course examines major developments in the visual arts from the prehistoric through the late Middle Ages. The focus is to explore artistic production within its cultural and social context. Museum visits are a course requirement with a possible trip to New York City museums. (Formerly ARTH 201) (CFPA; CGCL)

ARTh 104 Survey of Art from the 14th Century to the Present (3 credits)
This course examines major developments in the visual arts within a cultural and stylistic framework. The arts of painting, sculpture, architecture and the decorative arts will be examined within a cultural and stylistic framework. Museum visits are a course requirement with a possible visit to New York City museums. (Formerly ARTH 202) (CFPA; CGCL)

ARTh 135 Freshman Honors Colloquium (1 credit)
Prerequisite: Open to Commonwealth Honors students and to others at the discretion of the instructor
Freshman Honors Colloquia in art allow exceptionally able students to explore a challenging topic in small classes under close faculty supervision. Colloquia meet once a week for 50 minutes and culminate in a paper or artistic project, which provides the major part of the grade. Topics vary from semester to semester. Fall semester.

ARTh 136 Freshman Honors Colloquium (1 credit)
Prerequisite: Open to Commonwealth Honors students and to others at the discretion of the instructor
Freshman Honors Colloquia in art allow exceptionally able students to explore a challenging topic in small classes under close faculty supervision. Colloquia meet once a week for 50 minutes and culminate in a paper or artistic project, which provides the major part of the grade. Topics vary from semester to semester. Spring semester.

ARTh 199 First Year Seminar (3 credits)
Prerequisite: Open to all freshmen with a writing placement score of 3 or above or a SAT score of 500 or above or who have completed ENGL 101. Students with 24 or more transfer credits will have this requirement waived
First Year Seminars (FYS) are writing-intensive topic courses that introduce students to academic thought, discourse and practices. FYS courses prepare and orient students toward productive and fulfilling college careers by actively engaging them in a specific academic area of interest. Students will improve their writing, reading, research and basic information and technology skills while learning to work both collaboratively and independently. These courses will fulfill the First Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one FYS course may be taken for credit. (CFYS)

ARTh 203 American Art and Architecture (3 credits)
Trends in architecture, painting, sculpture and crafts are surveyed prior to the first colonial settlements in America to the achievements of the present day. Included are vernacular, folk and regional styles. A museum visit is assigned. Either semester. (CFPA; CMCL)

ARTh 205 Asian Art Survey: India, China and Japan (3 credits)
Major achievements in architecture, sculpture, pictorial arts and crafts of these three important cultures will be studied in their religious, historical and social contexts. Relationships will be made to other Asian and Euro-American art forms. A museum visit and project are assigned. (CFPA; CGCL; CMCL)

ARTh 206 History of Architecture (3 credits)
Religious, governmental, commercial and domestic buildings, globally and throughout history, are studied in terms of elements of style, systems, and materials of architectural construction, and the symbolic and expressive qualities of architecture. The careers and achievements of several architects will be examined in depth. (Formerly ARTH 102) (CFPA; CGCL)

ARTh 207 Introduction to African Art (3 credits)
Traditional arts of sub-Saharan Africa will be examined in cultural context, including sculpture, masks, painting, pottery, textiles, architecture and human adornment. Topics will cover how art is used to convey the cycle of life, to solve problems and to overcome adversity, with frequent comparisons to other cultures. The focus will be on the objects, with ethnographic material supplied to place the objects in the proper context. A museum or gallery visit is assigned. (CFPA; CGCL; CMCL)

ARTh 208 Survey of Islamic Art and Architecture (3 credits)
This course examines Islamic art, architecture and urbanism from its formation in the seventh century to the present in the Mediterranean region, the Near East and India. The first part of the course focuses on the creation and development of Islamic imperial artistic tradition in
the seventh century and its regionalization through the 14th century. The second half of the course emphasizes the grand imperial traditions of the Ottomans, the Safavids and the Mughals and the subsequent effects of colonialization and Westernization. A museum visit is assigned. Fall semester. (CFPA; CGCL; CMCL; CSPI)

**ARTH 211 Monuments as Cultural Symbols and Emblems of Power (3 credits)**

This course examines monuments that were or are currently politically significant and stand as national cultural symbols. We will study modification of the contextual meaning of specific monuments through their history as they are adapted to new governmental and national dictates. Monuments such as the World Trade Center, the Bamiyan Buddhas in Afghanistan, the Dome of the Rock in Jerusalem and war memorials such as the Shaw Memorial on Boston Common, Memorial Hall at Harvard University, the Iwo Jima Memorial, the Vietnam War Monument and Saddam Hussein’s Monument in Baghdad will be covered. Offered every other year. (CFPA; CMCL; CSPI)

**ARTH 214 Global Art History Study Tour (3 or 6 credits)**

A broad range of topics in the history of art is studied in museums and architectural sites, and related venues at a culturally rich location abroad or otherwise away from campus. Preparatory class work is conducted on campus prior to travel and assignments are completed upon return. This course may be repeated with different itineraries. Offered January intersession, spring break and summer. (CFPA; CGCL; CMCL; CWRT)

**ARTH 215 Themes in the Visual Arts (3 credits)**

Works of art and/or architecture are examined from the perspective of a common theme, bringing together works by various artists from diverse backgrounds, cultures and historical periods. At the same time, students are introduced to the viewing and analysis of art, the development of personal style and message, and the technical means used to achieve an artist's aim. This course may be repeated for different topics. Offered once every two years. (CFPA)

**ARTH 216 African-American Art (3 credits)**

This course will focus on African-American art and architecture from 1619 to the present. Various modes of artistic expression will be covered, including painting, photography, sculpture, ceramics and textiles. In addition, the aesthetic culture as well as the historical, social and political contexts in which these arts were produced will be examined. Offered every other year. (CFPA; CMCL)

**ARTH 218 History of Photography (3 credits)**

This course is a historical survey of photography from its beginnings to the present. Formal aspects of photography as art will be examined as well as the theoretical and societal context. Offered once every two years. (CFPA; CGCL; CMCL; CSPI)

**ARTH 219 MesoAmerican Art and Architecture (3 credits)**

This course will focus on MesoAmerican art and architecture from the Olmec to the Aztec. Various modes of artistic expression will be covered, including frescoes, metals, ceramics, sculpture and architecture. In addition, the cultural aesthetics as well as the historical, social and political contexts in which these arts were produced will be examined. Offered every two years. (CFPA; CGCL)

**ARTH 220 United States Art Study Tour (3 or 6 credits)**

This course offers off-campus programs within culturally rich areas of the United States. Participants will visit museums, galleries, working studios, architectural sites and/or other sites related to the visual arts. Emphasis is given to the first-hand viewing of art, experiencing settings involved in the creation of art and studying the artists, achievements, and styles of a particular region of our country. Preparatory work is conducted on campus prior to travel, and assignments and exams will be completed on the return. This course may be repeated with different itineraries and topics. (CFPA, CMCL)

**ARTH 286 Sophomore Honors Colloquium (1 credit)**

Prerequisite: Open to Commonwealth Honors students and to others at the discretion of the instructor

Sophomore Honors Colloquia in Art allow exceptionally able students to explore a challenging topic in small classes under close faculty supervision. Colloquia meet once a week for 50 minutes and culminate in a paper or artistic project, which provides the major part of the grade. Topics vary from semester to semester. Fall semester.

**ARTH 287 Sophomore Honors Colloquium (1 credit)**

Prerequisite: Open to Commonwealth Honors students and to others at the discretion of the instructor

Sophomore Honors Colloquia in Art allow exceptionally able students to explore a challenging topic in small classes under close faculty supervision. Colloquia meet once a week for 50 minutes and culminate in a paper or artistic project, which provides the major part of the grade. Topics vary from semester to semester. Spring semester.

**ARTH 298 Second Year Seminar (Speaking Intensive) (3 credits)**

Prerequisite: _ _ _ _ 199; Open to all sophomores and juniors who have completed ENGL 101, and the speaking skills requirement. Students with 54 or more transfer credits will have this requirement waived. Cannot be taken if _ _ _ _ 299 is taken for credit.
Second Year Seminars (SYS) are speaking-intensive topic courses that build on the academic skills and habits introduced in the First Year Seminar. SYS courses engage students in a specific academic area of interest and provide them with the opportunity to reinforce, share and interpret knowledge. Students will improve their speaking, reading, research and basic information and technology skills while building the connections between scholarship and action that are required for lifelong learning. These courses will fulfill the Second Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one SYS course may be taken for credit. (CSYS)

**ARTH 299  Second Year Seminar (Writing Intensive) (3 credits)**
Prerequisite: _ _ _ _ 199; Open to all sophomores and juniors who have completed ENGL 101 and ENGL 102. Students with 54 or more transfer credits will have this requirement waived. Cannot be taken if _ _ _ _ 298 is taken for credit.
Second Year Seminars (SYS) are writing-intensive topic courses that build on the academic skills and habits introduced in the First Year Seminar. SYS courses engage students in a specific academic area of interest and provide them with the opportunity to reinforce, share and interpret knowledge. Students will improve their writing, reading, research and basic information and technology skills while building the connections between scholarship and action that are required for lifelong learning. These courses will fulfill the Second Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one SYS course may be taken for credit. (CSYS)

**ARTH 308  Women in the Visual Arts (3 credits)**
This course will address the historical and contemporary perspectives of women artists, their contributions through traditional and nontraditional art forms, and will examine critically the extent to which this talent and art has not been fully recognized nor supported by various cultures and prevailing attitudes. **Offered once every two years.** (CFPA; CMCL)

**ARTH 309  Early Modern Art and Architecture (3 credits)**
Prerequisite: ARTH 103 or ARTH 104 or a 200-level art history (ARTH) course
Major developments in the visual arts are examined from 1850 to 1940. Attention is given to the theoretical foundations for these modern artistic movements as well as their stylistic distinctions. Museum visits are required, including a trip to New York City. **Offered each year.**

**ARTH 310  Art and Architecture since 1940 (3 credits)**
Prerequisite: ARTH 103 or ARTH 104 or a 200-level art history (ARTH) course
Major developments in painting, sculpture, architecture and other arts after 1940 are examined, with attention given to how they have reflected the cultural and social ideas and issues of our time. Consideration will be given as well to how the traditional forms and boundaries of the visual arts have been challenged and expanded through new mediums, technologies and approaches to visual communication. Museum and gallery visits are required, including a trip to New York City. **Offered each year.**

**ARTH 311  Orientalism (3 credits)**
This course critically examines Orientalism as both a way the West views the East, and as the East sometimes views itself. The focus will be on the visual arts – painting, photography, architecture and film, as well as literature and music, and how they depict the “Orient” from the 18th century through the present. Emphasis will also be placed on how the East adopted the same mode of expression as a lens to view the Islamic world. The course emphasizes the Middle East, but the Far East and India are also included in lectures, readings and assignments. Museum visits are a course requirement with a possible visit to New York City museums. **Offered every other year.** (CFPA; CGCL; CMCL; CSPI)

**ARTH 338  Honors Tutorial in Art (3 credits)**
**Prerequisite:** Open to Commonwealth and Departmental Honors students; consent of the Departmental Honors Committee is required
This tutorial involves special topics in art. Three hourly meetings weekly.

**ARTH 339  Honors Tutorial in Art (3 credits)**
**Prerequisite:** Open to Commonwealth and Departmental Honors students; consent of the Departmental Honors Committee is required
This tutorial involves special topics in art. Three hourly meetings weekly.

**ARTH 414  Global Art History Study Tour (Advanced) (3 or 6 credits)**
A broad range of topics in the history of art is studied in museums and architectural sites in Europe. Preparatory class work is conducted on campus prior to travel; assignments and exams are completed upon return. This course may be taken twice with different itineraries and course topics. **Offered January intersession, spring break and summer. May be taken for graduate-level credit.**

**ARTH 485  Honors Thesis in Art (3 credits)**
**Prerequisite:** Open to Commonwealth and Departmental Honors students; ARTH 338; and consent of the Departmental Honors Committee
One-hour weekly meetings with the thesis director will culminate in a thesis comprising both art works and a written corollary. With the consent of the Departmental Honors Committee and the thesis director, this course may be extended into a second semester for three
additional credits depending upon the scope of the project. Whether the final version of the thesis qualifies the student to graduate with honors will be determined by the Departmental Honors Committee, who will review the results as presented by the student.

**ARTH 498 Internship in Art History (1-15 credits)**
*Prerequisite: Consent of department chairperson; formal application required*
This is a nonclassroom experience designed for a limited number of junior and senior art majors to complement their academic preparation. The internship provides work-study experience in areas related to art history such as museums, galleries or art libraries, but is not limited to these options. A faculty member in the department will serve as adviser and evaluator of all work projects. This course may be repeated for a maximum of 15 credits.

**ARTH 499 Directed Study in Art History (1-3 credits)**
*Prerequisite: Consent of the department; formal application required*
Directed study is open to juniors and seniors who have demonstrated critical and analytical abilities in their studies and who wish to pursue a project independently. This course may be taken twice for a maximum of six credits. *Offered either semester.*

**ARTH 503 Directed Study (1-3 credits)**
*Prerequisite: Consent of the department chairperson; formal application required*
Directed study is designed for the graduate student who desires to study selected topics in a specific field. For details, consult the paragraph titled “Directed or Independent Study” in the “College of Graduate Studies” section of this catalog. This course may be repeated for a maximum of six credits.

**ARTH 508 Women in the Visual Arts (3 credits)**
This course will address the historical and contemporary perspectives of women artists, their contributions through traditional and nontraditional art forms, and will examine critically the extent to which this talent and art had not been fully recognized nor supported by various cultures and prevailing attitudes.

**ARTH 509 Early Modern Art and Architecture (3 credits)**
Major developments in painting, sculpture, and architecture are examined from 1850 to 1940. Attention is given to the theoretical foundations for these modern artistic movements as well as their stylistic distinctions.

**ARTH 510 Art and Architecture since 1940 (3 credits)**
Major developments in painting, sculpture, architecture and other arts after 1940 are examined, with attention given to how they have reflected the cultural and social ideas and issues of our time. Consideration will be given as well to how the traditional forms and boundaries of the visual arts have been challenged and expanded through new mediums, technologies and approaches to visual communication.

**ARTH 511 Orientalism (3 credits)**
This course critically examines Orientalism as both a way the West views the East, and as the East sometimes views itself. The focus will be on the visual arts: painting, photography, architecture and film, as well as literature and music, and how they depict the “Orient” from the 18th century through the present. Emphasis will also be placed on how the East adopted the same mode of expression as a lens to view the Islamic world. The course emphasizes the Middle East, but the Far East and India are also included in lectures, readings and assignments. Museum trips to Boston and New York are a requirement.

**ARTH 514 Global Art History Study Tour (3-6 credits)**
Topics in the history of art are studied in museums, architectural sites and related venues at a culturally rich location abroad or otherwise away from campus. Preparatory class work is conducted on campus prior to travel, and assignments are completed upon return. This course may be repeated in the case of different itineraries.

**ARTH 515 Asian Art Survey: India, China and Japan (3 credits)**
Major achievements in architecture, sculpture, pictorial arts and crafts of these three important cultures will be studied in their religious, historical and social contexts. Relationships will be made to other Asian and Euro-American art forms. Museum visits will be required and will relate to an assigned research paper and in-class presentation.

**Art History: Other Approved Courses**

**ARTH 490 Art History Studies in Oxford (3 credits)**
*Prerequisite: Students will normally be expected to be in their junior or senior year*
Select topics in art and architecture will range from studies of art movements and styles with a unique British character to luminaries in
British art. Connections will be explored with art and architectural traditions in Europe and beyond. Primary sources such as the Ashmolean Museum in Oxford and the National Portrait Gallery in London will be visited. (This is a special summer program in England at Oxford University.) Additional fee required.

**ARTH 492 Topics in Art History**  
*Prerequisite: Consent of instructor*  
This course addresses specific topics of limited or special interest in art history. Specific topics will be announced prior to registration. This course may be repeated for different topics.

### ART STUDIO

**ARTS 104 Digital Imaging and Four-Dimensional Design (3 credits)**  
Students develop technical, conceptual and aesthetic experience pertaining to the creation of two-dimensional digital artworks as well as artworks that engage with the fourth dimension of art: space and time. Students gain an introductory knowledge of several art and design software programs. Included topics in the course are scanning, vector drawing, raster painting and time-based digital and analog media. Six hours per week. *(Formerly ARTS 265) Additional fee required.* *(CFPA)*

**ARTS 125 Drawing I (3 credits)**  
This course focuses on methods of direct observational drawing from life using inanimate objects, architecture and the landscape as subjects. It emphasizes realistic rendering of form and space using techniques of perspective and value. It also focuses on developing an understanding of formal design as related to drawing. The study of the figure will not be covered in this course. Six hours per week. *Either semester. Additional fee required.* *(CFPA)*

**ARTS 130 Two-Dimensional Design (3 credits)**  
Fundamental elements and principles of two-dimensional design, including color, shape, line, texture, balance, space and the organization of these elements in a work of art are studied through studio exercises. Six hours per week. *Either semester. Additional fee required.* *(CFPA)*

**ARTS 135 Freshman Honors Colloquium (1 credit)**  
*Prerequisite: Open to Commonwealth Honors students and to others at the discretion of the instructor*  
Freshman Honors Colloquia in art allow exceptionally able students to explore a challenging topic in small classes under close faculty supervision. Colloquia meet once a week for 50 minutes and culminate in a paper or artistic project, which provides the major part of the grade. Topics vary from semester to semester. *Fall semester.*

**ARTS 136 Freshman Honors Colloquium (1 credit)**  
*Prerequisite: Open to Commonwealth Honors students and to others at the discretion of the instructor*  
Freshman Honors Colloquia in art allow exceptionally able students to explore a challenging topic in small classes under close faculty supervision. Colloquia meet once a week for 50 minutes and culminate in a paper or artistic project, which provides the major part of the grade. Topics vary from semester to semester. *Spring semester.*

**ARTS 140 Three-Dimensional Design (3 credits)**  
In this studio course, students develop awareness of tools, machinery, materials and processes related to art and design in physical space. Students investigate related disciplines within three-dimensional design (namely sculpture, architecture, craft and industrial design) and create studio projects that provide insight for working with form. Six hours per week. *Either semester. Additional fee required.* *(CFPA)*

**ARTS 199 First Year Seminar (3 credits)**  
*Prerequisite: Open to all freshmen with a writing placement score of 3 or above or a SAT score of 500 or above or who have completed ENGL 101. Students with 24 or more transfer credits will have this requirement waived*  
First Year Seminars (FYS) are writing-intensive topic courses that introduce students to academic thought, discourse and practices. FYS courses prepare and orient students toward productive and fulfilling college careers by actively engaging them in a specific academic area of interest. Students will improve their writing, reading, research and basic information and technology skills while learning to work both collaboratively and independently. These courses will fulfill the First Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one FYS course may be taken for credit. *(CFYS)*

**ARTS 204 Video Art (3 credits)**
This introductory project-based course concentrates on sculpting time and space as artistic materials, which can be used, interpreted or molded expressively through video, animation and sound media. The course requires field trips to art exhibitions in the area. Six hours per week. **Offered every other semester. Additional fee required.** (CFPA)

**ARTS 205 Three-Dimensional Modeling and Animation (3 credits)**  
*Prerequisite: ARTS 130 or consent of instructor*  
The aesthetics, theory, context and methods of three-dimensional imaging will be expressed in creative digital environments. Technique and software will be covered as appropriate to assigned and student-initiated work. This course will consist of studio, lecture and readings. Six hours per week. **Offered every third semester. Additional fee required.**

**ARTS 215 Global Studio Art Study Tour I (3 credits)**  
*Prerequisite: Consent of instructor*  
The study tour is offered to students with prior experience in the scheduled country. Students study a wide range of topics in studio art at culturally rich locations abroad. Preparatory class work is conducted on campus prior to travel, studio instruction is conducted while on the tour and assignments are completed upon return. This course may be repeated for a maximum of six credits with different itineraries. (CFPA; CGCL; CWRT)

**ARTS 216 Photography I (3 credits)**  
This course examines the historical foundations of photography and the fundamentals of photographic techniques such as lenses, lighting, filters and exposure. Through regular shooting assignments in black and white, students develop an ability to appreciate photographic technology and visual aesthetics by making and appraising their own photographs. Students must have access to an adjustable 35mm SLR camera. A gallery/museum visit is assigned. Six hours per week. **Either semester. Additional fee required.**

**ARTS 217 Digital Photography I (3 credits)**  
*Prerequisite: ARTS 104 and ARTS 216; or consent of instructor*  
In this course, students learn to make still pictures with a professional digital single lens reflex camera, to color manage the work flow and to make fine prints. Covered in the course is digital raw file processing, creative shooting, editing and image manipulation techniques using image-processing software. Students complete a thematic semester-long project to develop technical, aesthetic and conceptual skills, including flash photography techniques and location lighting methods. Students learn about and complete projects addressing stock photography and location-specific genre of commercial photography. Cameras are provided for this course. Six hours per week. **Offered every other semester. Additional fee required.**

**ARTS 219 Topics in Photography (3 credits)**  
Topics of current or special interest in photography will be addressed in this course at the beginner or intermediate level. Topics are announced prior to registration. This course may be repeated for different topics. Six hours per week. **Additional fee required.**

**ARTS 225 Drawing II (3 credits)**  
*Prerequisite: ARTS 125 and ARTS 130; or consent of instructor*  
This course strengthens the foundation principles gained from Drawing I and places emphasis on the human figure. This course expands upon the understanding of line, shape, value, proportions and composition as related to the human form. This course addresses skills of observation, visual articulation, critical and conceptual thinking. Six hours per week. **Offered either semester. Additional fee required.**

**ARTS 230 Painting I (3 credits)**  
*Prerequisite: ARTS 125 and ARTS 130*  
This course will provide students with an understanding of the technical foundations of the discipline, such as the importance of underpainting, mixing, blending, building form and painting techniques. Through specific exercises and assignments, students will gain a greater understanding of color theory and its importance in imagery development. Six hours per week. **Offered either semester. Additional fee required.**

**ARTS 240 Sculpture I (3 credits)**  
*Prerequisite: ARTS 140 or consent of instructor*  
This course is an introduction to design experimentation with traditional and new problems in a wide range of media. Six hours per week. **Either semester. Additional fee required.**

**ARTS 255 Printmaking I (3 credits)**  
*Prerequisite: ARTS 125 and ARTS 130; or consent of instructor*  
This course explores imagery and content through the medium of printmaking. Various techniques are demonstrated. Students experiment with process as a means of developing understanding and skills. Six hours per week. **Either semester. Additional fee required.**
ARTS 260  Graphic Design I (3 credits)
Prerequisite: ARTS 125 and ARTS 130 or consent of instructor
This course introduces the concepts and design principles of typography, page layout, and the relationship between type and image. Students will develop graphic design skills through a series of course projects. Both traditional and digital media will be used. Six hours per week. Either semester. Additional fee required.

ARTS 267  Web Art I (3 credits)
This course introduces basic techniques of Web production such as research on prices for Web domain names, Internet service providers, permissions, preparation of text, photo images, video, sound and writing basic XHTML code. Six hours per week. Additional fee required.

ARTS 270  Ceramics I (3 credits)
This course is an introduction to materials and techniques including hand-building, decorating and firing. Six hours per week. Either semester. Additional fee required.

ARTS 273  Glass I (3 credits)
Prerequisite: ARTS 130 or consent of instructor
This course explores the technical, traditional and contemporary, and aesthetic possibilities of glass: copper foil, lead came work, fusing, slumping and enamels. Six hours per week. Either semester. Additional fee required.

ARTS 280  Metals I (3 credits)
Prerequisite: ARTS 140 or consent of instructor
This course is an introduction to basic design, construction and forming techniques. Jewelry, constructed forms and sculpture are covered. Six hours per week. Either semester. Additional fee required.

ARTS 286  Sophomore Honors Colloquium (1 credit)
Prerequisite: Open to Commonwealth Honors students and to others at the discretion of the instructor
Sophomore Honors Colloquia in art allow exceptionally able students to explore a challenging topic in small classes under close faculty supervision. Colloquia meet once a week for 50 minutes and culminate in a paper or artistic project, which provides the major part of the grade. Topics vary from semester to semester. Fall semester.

ARTS 287  Sophomore Honors Colloquium (1 credit)
Prerequisite: Open to Commonwealth Honors students and to others at the discretion of the instructor
Sophomore Honors Colloquia in art allow exceptionally able students to explore a challenging topic in small classes under close faculty supervision. Colloquia meet once a week for 50 minutes and culminate in a paper or artistic project, which provides the major part of the grade. Topics vary from semester to semester. Spring semester.

ARTS 290  Weaving I (3 credits)
This course is an introduction to traditional and contemporary weaving and related techniques. Assigned projects stress the aesthetic combined with the technical considerations of fiberwork. Six hours per week. Either semester. Additional fee required.

ARTS 298  Second Year Seminar (Speaking Intensive) (3 credits)
Prerequisite: _ _ _ _ 199; Open to all sophomores and juniors who have completed ENGL 101, and the speaking skills requirement. Students with 54 or more transfer credits will have this requirement waived. Cannot be taken if _ _ _ _ 299 is taken for credit.
Second Year Seminars (SYS) are speaking-intensive topic courses that build on the academic skills and habits introduced in the First Year Seminar. SYS courses engage students in a specific academic area of interest and provide them with the opportunity to reinforce, share and interpret knowledge. Students will improve their speaking, reading, research and basic information and technology skills while building the connections between scholarship and action that are required for lifelong learning. These courses will fulfill the Second Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one SYS course may be taken for credit. (CSYS)

ARTS 299  Second Year Seminar (Writing Intensive) (3 credits)
Prerequisite: _ _ _ _ 199; Open to all sophomores and juniors who have completed ENGL 101 and ENGL 102. Students with 54 or more transfer credits will have this requirement waived. Cannot be taken if _ _ _ _ 298 is taken for credit.
Second Year Seminars (SYS) are writing-intensive topic courses that build on the academic skills and habits introduced in the First Year Seminar. SYS courses engage students in a specific academic area of interest and provide them with the opportunity to reinforce, share and interpret knowledge. Students will improve their writing, reading, research and basic information and technology skills while building the connections between scholarship and action that are required for lifelong learning. These courses will fulfill the Second Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one SYS course may be taken for credit. (CSYS)
ARTS 301  Web Art II (3 credits)
Prerequisite: ARTS 267
This course focuses on the screen-based presentation of visual information. Students will design and produce a Web site. Emphasis is
upon the design and implementation of nonlinear visual presentations. The use of text, animation, sound and graphic imagery will be
addressed. Contrasts and comparisons between screen-based and print-based presentation of visual information will be discussed, as will
contrasts and comparisons between Web site and CD Rom design and production. Six hours per week. Offered once yearly. (Formerly
ARTS 367) Additional fee required.

ARTS 316  Photography II (3 credits)
Prerequisite: ARTS 130 and ARTS 217; or consent of instructor
Students work to develop a fine art portfolio of conceptually thematic and expressive photography. Emphasis is placed on aesthetics,
conceptual development and technical precision. Students are introduced to a wide variety of contemporary fine art photographers. Fine
darkroom printing with archival fiber paper and print matting/mounting is introduced. Students learn and apply lighting techniques for a
variety of studio and commercial photography applications. A manual film camera and a gray card are required. A tripod and cable release
are suggested. Six hours per week. Either semester. Additional fee required.

ARTS 317  Digital Photography II (3 credits)
Prerequisite: ARTS 217 or consent of instructor
Students will develop a conceptual complexity in their artworks through a combination of projects that simulate various genres of
commercial photography and assignments focused on art making through personal expression. Students enrolled in this course will further
their knowledge of shooting still pictures with a professional digital single lens reflex camera and learn to use studio lighting techniques for
digital photography in commercial and artistic applications. Digital image manipulation will also be covered. The university provides
cameras for the duration of the course on a lending basis. Six hours per week. Offered every other semester. Additional fee required.

ARTS 319  Field Experience in Photography (3 credits)
Prerequisite: ARTS 216 and ARTS 217 and ARTS 316; or consent of instructor
In this course, students will become prepared both mentally and practically to begin a career in photography. Students will be introduced to
a variety of career options and gain the knowledge needed to operate a freelance photography business. Topics include creating a
business plan, market research, self-promotion, portfolio development, legal requirements, tax preparation, professional organizations,
equipment, studio development and pricing. Field trips and guest speakers will enhance the learning experience. Students produce a
portfolio of commercial photography assignments. The class does not include darkroom instruction although students may use the college
darkroom. Students must have access to an adjustable camera, a tripod, a cable release and a gray card. A handheld light meter is
recommended. Six hours per week. Either semester. Additional fee required.

ARTS 325  Advanced Drawing (3 credits)
Prerequisite: ARTS 225 or consent of instructor
Advanced projects will be undertaken in chosen media under direct supervision of a faculty member. This course may be taken three
times. Six hours per week. Either semester. Additional fee required.

ARTS 330  Painting II: Figure (3 credits)
Prerequisite: ARTS 230 and ARTS 225
This course will focus on the compositional context of the figure and portraiture from both a historical and contemporary approach. The
human form will be studied using both nude and costumed models, using various techniques. Six hours per week. Offered either semester. Additional fee required.

ARTS 332  Mixed Media (3 credits)
Prerequisite: ARTS 225 and one other 200-level ARTS course In this course, students develop inventive and experimental approaches to
a variety of media.
The student will examine how media, idea and composition relate while exploring nontraditional uses of traditional media, as well as the
blurring of boundaries between the disciplines when working in assemblage, mixed-media/collage formats. Six hours per week.

ARTS 338  Honors Tutorial in Art (3 credits each semester)
Prerequisite: Open to Commonwealth and Departmental Honors students; consent of the Departmental Honors Committee is required
This tutorial involves special topics in art. Three hourly meetings weekly.

ARTS 339  Honors Tutorial in Art (3 credits each semester)
Prerequisite: Open to Commonwealth and Departmental Honors students; consent of the Departmental Honors Committee is required
This tutorial involves special topics in art. Three hourly meetings weekly.

ARTS 340  Sculpture II (3 credits)
Prerequisite: ARTS 240 or consent of instructor
Advanced projects will be undertaken in design and media. Six hours per week. Either semester. Additional fee required.

ARTS 355  Printmaking II (3 credits)
Prerequisite: ARTS 255
A further development of skills and aesthetic approaches in printmaking beyond introductory level will be covered, using a range of media and techniques. Six hours per week. Additional fee required.

ARTS 356  Bookbinding and Book Arts (3 credits)
This course is designed to introduce students to bookbinding and to gain competence in bookbinding techniques as a means of articulating ideas. Various techniques will be demonstrated, including case binding, adhesive book board binding and Coptic binding. As technical facility is mastered, students will explore imagery and content to create one-of-a-kind artist’s books. Additional fee required.

ARTS 360  Business Issues for Visual Artists (3 credits)
The business and professional side of art and the pursuit and management of a career in art is covered. A study is made of galleries, museums and commercial art fields dealing with aspects of exhibiting and selling work and the development of relevant business skills. The course includes field trips and guest speakers. Six hours per week. Spring semester.

ARTS 361  Graphic Design II (3 credits)
Prerequisite: ARTS 260
The course is a more advanced study of graphics, typography and layout design. The integration of typography and visual imagery to specific assignments is emphasized. Six hours per week. Offered once each year. Additional fee required.

ARTS 362  Graphic Design III (3 credits)
Prerequisite: ARTS 361
The course is advanced study in design. It deals with the integration of illustration, design and typography to specific projects the designer could be expected to work in a studio, agency or in-house design situation. Two- and three-dimensional areas are explored. Six hours per week. Offered once each year. Additional fee required.

ARTS 368  Synthesis of Graphic Design and Photography (3 credits)
Prerequisite: ARTS 316 and ARTS 362 or consent of instructor
The course builds upon both graphic design and photography knowledge. The student will develop an understanding of how graphic forms and photo images create meaning when united. Students are introduced to visual structures specific to the practice of merging graphic design and photography. This course references both historical and current trends in image making.

ARTS 370  Ceramics II (3 credits)
Prerequisite: ARTS 270
This course is an introduction to ceramic materials and techniques using the potter’s wheel, as well as decorating and firing. Six hours per week. Either semester. Additional fee required.

ARTS 371  Ceramics III (3 credits)
Prerequisite: ARTS 370 or consent of instructor
Advanced projects will be undertaken in either hand building or wheel work under the direct supervision of a faculty member. Six hours per week. Either semester. Additional fee required.

ARTS 373  Glass II (3 credits)
Prerequisite: ARTS 273
Projects will be undertaken under direct supervision of a faculty member to develop techniques included in Glass I, with the addition of slumping, casting and sand blasting. Six hours per week. Offered once each year. Additional fee required.

ARTS 376  Typography (3 credits)
Prerequisite: ARTS 361
This course builds upon existing graphic design skills while looking at graphic design through the lens of typography. Students develop a heightened sensitivity toward typographic design through projects in information design, publication design, screen-based applications and motion graphics. Students also experience traditional letterpress printing and learn type classification and history. Six hours per week. Additional fee required.

ARTS 380  Metal Design II (3 credits)
Prerequisite: ARTS 280 or consent of instructor
Advanced problems and techniques will be undertaken. Six hours per week. *Either semester. Additional fee required.*

**ARTS 381 Metals III (3 credits)**
Prerequisite: ARTS 380 or consent of instructor
The course focuses on specialized techniques for the design and creation of jewelry in precious metals and experimental construction techniques with these metals. Six hours per week. *Either semester. Additional fee required.*

**ARTS 390 Weaving II (3 credits)**
Prerequisite: ARTS 290 or consent of instructor
Advanced problems and techniques are undertaken. Six hours per week. *Either semester. Additional fee required.*

**ARTS 402 Art Studio Senior Seminar (3 credits)**
Prerequisite: Senior standing
This course will involve the investigation and articulation of a topic of personal interest to each student, helping to establish models of critique and production that can be sustained beyond the program and in the profession. Students will begin the process by defining their intentions through an essay on concept, purpose and intent. Each student will work on self-directed projects, exploring conceptual ideas including short trial runs of techniques and strategies, on the path toward successful completion of a comprehensive body of work. This course may be repeated once for credit. Offered fall semester.

**ARTS 403 Convergent Media Projects (3 credits)**
Prerequisite: ARTS 104 and one of the following: ARTS 204 or ARTS 205 or ARTS 301
This is a project-based studio course which cultivates and develops the student’s unique interests in New Media Art. The course investigates combinations within digital media and digital media links to tangible forms. Students will work critically and innovatively on independent or collaborative projects that explore issues of identity, artistic expression, privacy, dehumanization, etc. Students can choose between net-art, web design; 3-D as applied to gaming, sculpture or jewelry; or video as applied to live performance (VJ) and video installations. This course may be repeated for credit. Six hours per week. *Alternate semesters. Additional fee required.*

**ARTS 415 Global Studio Art Study Tour II (3 credits)**
Prerequisite: Consent of instructor
The study tour is offered to students with prior experience in the scheduled country. Students study a wide range of topics in studio art at culturally rich locations abroad. Preparatory class work is conducted on campus prior to travel, studio instruction is conducted while on the tour and assignments are completed upon return. This course may be repeated for a maximum of six credits. (CFPA; CGCL; CWRT)

**ARTS 416 Advanced Photography (3 credits)**
Prerequisite: ARTS 316
The course studies photography at the advanced level. Emphasis is placed on technical, aesthetic and conceptual development for the creation of a professional portfolio. Students develop a self-directed thematic body of photography. Students learn large format camera skills including shooting, film scanning and printing. Topics covered also include digital and/or darkroom image manipulation, studio and location lighting, writing within the discipline and professional presentation of artwork. A manual film camera and/or professional digital camera and gray card are required. A tripod and handheld light meter are recommended. This course may be repeated three times for credit. Six hours per week. *Either semester. Additional fee required. May be taken for graduate-level credit.*

**ARTS 418 Advanced Topics in Photography (3 credits)**
Prerequisite: ARTS 217 or consent of instructor
Topics of current or special interest in photography are offered at an advanced level. Special topics are announced prior to registration. This course may be repeated for different topics. Six hours per week. *Either semester. Additional fee required. May be taken for graduate-level credit.*

**ARTS 430 Advanced Painting (3 credits)**
Prerequisite: ARTS 330
In this course, students will concentrate on personal perceptions and ideas in relation to the discipline and to contemporary trends, developing a body of work that articulates an inventive and conceptual approach to painting. Participation in an exhibition at the end of the semester is a requirement. The securing of the exhibition venue is the responsibility of the student. This course may be repeated twice for a maximum of nine credits. Six hours per week. *Offered either semester. Additional fee required. May be taken for graduate-level credit.*

**ARTS 440 Advanced Sculpture (3 credits)**
Prerequisite: ARTS 340 or consent of instructor
Advanced projects will be undertaken in chosen concepts and media under the direct supervision of the instructor. This course may be repeated for additional credit to further develop skills and conceptual approaches. Six hours per week. Additional fee required. May be taken for graduate-level credit.

ARTS 450 Advanced Printmaking (3 credits)
Prerequisite: ARTS 355 or consent of instructor
Advanced projects will be undertaken in chosen media and content. This course may be taken three times. Six hours per week. Either semester. Additional fee required. May be taken for graduate-level credit.

ARTS 460 Advanced Graphics (3 credits)
Prerequisite: ARTS 362
This course examines the application of graphic design and its visual communication to the current problems and emphasizes the study and recognition of contemporary trends in design, color and visual images as viable means to projects assigned. Two- and three-dimensional areas are explored, as well as the use of multimedia techniques to project conceptual ideas. This course may be taken three times for credit. Six hours per week. Offered when needed by a number of students in upper levels. Additional fee required. May be taken for graduate-level credit.

ARTS 463 Projects in Graphic Design (3 credits)
Prerequisite: ARTS 361
This course examines the application of graphic design and its visual communication to current problems, and emphasizes the study and recognition of contemporary trends in design, color and visual images as visible means. This course may be taken three times for different topics. Six hours per week. Additional fee required. May be taken for graduate-level credit.

ARTS 470 Advanced Ceramics (3 credits)
Prerequisite: ARTS 371 or consent of instructor
Advanced projects will be undertaken in either hand-building or wheel work under direct supervision of a faculty member. This course may be taken three times for credit. Six hours per week. Either semester. Additional fee required. May be taken for graduate-level credit.

ARTS 473 Advanced Glass (3 credits)
Prerequisite: ARTS 373
Advanced projects will be undertaken in chosen techniques under direct supervision of a faculty member. This course may be taken three times. Six hours per week. Offered once each year. Additional fee required. May be taken for graduate-level credit.

ARTS 480 Advanced Metals (3 credits)
Prerequisite: ARTS 381 or consent of instructor
Advanced projects will be undertaken in chosen media under direct supervision of a faculty member. This course may be taken three times. Six hours per week. Either semester. Additional fee required. May be taken for graduate-level credit.

ARTS 485 Honors Thesis in Art (3 credits)
Prerequisite: Open to Commonwealth and Departmental Honors students; ARTS 338 and consent of the Departmental Honors Committee
One-hour weekly meetings with the thesis director will culminate in a thesis comprising both art works and a written corollary. With the consent of the Departmental Honors Committee and the thesis director, this course may be extended into a second semester for three additional credits depending upon the scope of the project. Whether the final version of the thesis qualifies the student to graduate with honors will be determined by the Departmental Honors Committee, who will review the results as presented by the student.

ARTS 490 Advanced Weaving (3 credits)
Advanced projects will be undertaken in chosen concepts and media under the direct supervision of the instructor. This course may be repeated for additional credit to further develop skills and conceptual approaches. Six hours per week. Additional fee required. May be taken for graduate-level credit.

ARTS 492 Topics in Art (3 credits)
Topics of limited or special interest in art education or studio art are offered. Specific topics are announced prior to registration. This course may be repeated for different topics. Either semester. May be taken for graduate-level credit.

ARTS 498 Internship in Art (3-15 credits)
Prerequisite: Consent of the department chairperson; formal application required
This is a non-classroom experience designed for a limited number of junior and senior majors to complement their academic preparation. This course may be repeated for a maximum of 15 credits. Either semester.
ARTS 499 Directed Study in Art (1-3 credits)
Prerequisite: Consent of the department; formal application required
Directed study is open to juniors and seniors who have demonstrated critical and analytical abilities in their studies and who wish to pursue a project independently. This course may be taken twice for a maximum of six credits. Offered either semester.

ARTS 501 Art Studio Graduate Seminar (3 credits)
Prerequisite: Consent of instructor
This course will involve the conceptual investigation and development of a topic/theme of personal interest to each graduate student. Students will begin by defining their thematic concepts through an essay on purpose and intent. It involves extensive scholarly research and experimentation, stressing self-exploration and independent work in an atmosphere of ongoing critical discussion involving social, political and artistic concerns. It is grounded in the assumption that each student arrives exceptionally motivated and committed to creating art. The students themselves give form and vitality to the working environment through their energy, diversity and interaction while working towards completion of a comprehensive body of work. This course may be repeated two times. Additional fee required.

ARTS 502 Research (3 or 6 credits)
Prerequisite: Consent of department; formal application required
Original research is undertaken by the graduate student in their field. For details, consult the paragraph titled “Directed or Independent Study” in the “College of Graduate Studies” section of this catalog. This course may be repeated for a maximum of six credits.

ARTS 503 Directed Study (1-3 credits)
Prerequisite: Consent of department; formal application required
Directed study is designed for the graduate student who desires to study selected topics in a specific field. For details, consult the paragraph titled “Independent Study” in the “College of Graduate Studies” section of this catalog. This course may be repeated for a maximum of six credits.

ARTS 516 Graduate Photography (3 credits)
Prerequisite: Six credits in photography or consent of instructor
Students in the course practice photography at an advanced level. Students complete a substantial professional portfolio of photography artworks. Project assignments, objectives and requirements will be determined according to the individual student’s background and interests. The course may be repeated up to two times for nine credits. Six hours per week. Additional fee required.

ARTS 517 Graduate Digital Photography (3 credits)
Prerequisite: ARTS 104 and ARTS 216; or consent of instructor
Students learn to take still pictures with a professional digital single lens reflex camera, to color manage the workflow and to make fine prints. Covered in the course are digital raw file processing, creative shooting, editing and image manipulation techniques using image-processing software. Students complete a substantial professional portfolio of photography artworks. Project assignments, objectives and requirements will be determined according to the individual student’s background and interests. This course may be repeated two times for nine credits. Six hours per week. Additional fee required.

ARTS 519 Field Experience in Photography Techniques (3 credits)
Prerequisite: ARTS 216 and consent of instructor
During the semester, students will be taken on a series of field trips. While on location, the instructor will assist students in determining good composition, solving problems related to light measurement and determining correct exposure under a variety of conditions. Emphasis will be placed on regular shooting assignments in the field and critiques, which will be held on campus or at a suitable off-campus location. Students must have access to an adjustable camera, a tripod, a cable release and a gray card. Although not necessary, it is desirable for students to have a hand-held light meter.

ARTS 525 Graduate Drawing (3 credits)
Prerequisite: Six credits in drawing or consent of instructor
Graduate level course work presumes an established level of proficiency in depicting the human figure as well as a comprehensive understanding of the full range of drawing materials and processes, to include mixed media. Course activities, as they often are combined with Drawing II, may frequently involve the human form as a starting point for expanded activity toward the development of a personal style. Nurturing a unique style that respects both ideational and/or observational concepts is a primary focus within this course. Every effort will be made to connect to style of drawing, past or present, as well as to luminaries within each (e.g., field trips, library research and, whenever possible, studio visits). This course may be repeated for up to three times for credit. Six hours per week. Either semester. Additional fee required.

ARTS 530 Graduate Painting (3 credits)
**ARTS 532 Mixed Media (3 credits)**

The Mixed Media course enables the student to explore conceptual ideas through a wide range of both traditional and non-traditional materials expanding on the possibilities and versatility of painting and drawing beyond standard approaches. Students explore painting and drawing on alternative 3-D objects and non-canvas/paper surfaces, such as: glass, steel, wood, plastic and aluminum. The student researches contemporary critical art theories, develops a vocabulary that addresses and informs his/her work, and examines how media, ideas and composition relate specifically to nontraditional materials. Additional fee required. This course may be repeated twice.

**ARTS 540 Graduate Sculpture (3 credits)**

Prerequisite: Six credits in sculpture or consent of instructor

A course designed to challenge the student's grasp of the function and form and its expressive potential through the study of pure form and forms in nature. The materials used are clay, plaster, wood and metal. This course may be repeated up to three times credit. Six hours per week. Either semester. Additional fee required.

**ARTS 550 Graduate Printmaking (3 credits)**

Prerequisite: Six credits in printmaking or consent of instructor

This is a course in printmaking for those with previous experience. Course objectives and requirements will be planned on the basis of the individual student's interests and background. This course may be repeated up to three times for credit. Six hours per week. Either semester. Additional fee required.

**ARTS 556 Bookbinding and Book Arts (3 credits)**

This course is designed to introduce students to bookbinding. Various techniques will be demonstrated, including a case binding, adhesive book binding and Coptic binding. As technical facility is mastered, studies will explore imagery, content and narrative structure to create one-of-a-kind artist's books. Additional fee required.

**ARTS 563 Advanced Graphic Design (3 credits)**

Prerequisite: ARTS 362

This course examines the application of graphic design and its visual communication to the current problems, and emphasizes the study and recognition of contemporary trends in design, color and visual images as viable means to projects assigned. Two- and three-dimensional areas are explored, as well as the use of multimedia techniques to project conceptual ideas. This course may be repeated up to three times for credit. Six hours per week. Additional fee required.

**ARTS 570 Graduate Ceramics (3 credits)**

Prerequisite: Six credits in ceramics or consent of instructor

Work in wheel-throwing, hand-building, sculptural ceramics, clay technology, glaze chemistry or studio management in an individualized program depending upon the student's previous course work, abilities and interests is undertaken. This course may be repeated up to three times for credit. Six hours per week. Either semester. Additional fee required.

**ARTS 573 Graduate Glass (3 credits)**

Prerequisite: ARTS 473

This is a course in glass for those with previous experience. Advanced projects will be undertaken in chosen techniques under direct supervision of a faculty member. This course may be repeated up to three times for credit. Six hours per week. Offered once each year. Additional fee required.

**ARTS 580 Graduate Metals (3 credits)**

Prerequisite: Six credits in metals or consent of instructor

Work in surface embellishment, construction, casting and forming of non-ferrous metals is undertaken. Emphasis is on experimentation with new technology, materials and techniques. This course may be repeated up to three times for credit. Six hours per week. Either semester. Additional fee required.

**ARTS 590 Graduate Weaving (3 credits)**

Prerequisite: Six credits in weaving or consent of instructor

Advanced work in fiber planned in accordance with the student's prior course work and experience is undertaken. Emphasis given to thorough exploration of color, design and fiber selection in the execution of technically ambitious projects. Areas of study may include rug weaving, tapestry, and challenging projects that explore technical and aesthetic considerations.
weaving, eight-harness double weaves, sculptural weaving and tapestry. This course may be repeated up to three times for credit. Six hours per week. Additional fee required.

**ARTS 592  Graduate Topics in Art (3 credits)**
Topics of limited or special interest will be offered to graduate students in art education or studio art. Specific topics will be announced prior to registration. This course may be repeated for different topics.

### Art Studio: Other Approved Courses

**ARTS 514  Art History Study Tour (Advanced) (3-6 credits)**
A broad range of topics in the history of art is studied in museums and architectural sites in Europe. Preparatory class work is conducted on campus prior to travel; assignments and exams are completed upon return. This course may be repeated twice for different itineraries.

**ARTS 562  Graphic Design III (3 credits)**
Prerequisite: ARTS 361
This course includes advanced study in design. Dealing with the integration of illustration, design and topography to specific projects, the designer could be expected to work in a studio, agency or in-house design situation. Two and three-dimensional areas are explored. This course may be taken up to three times for credit. Six hours per week. Additional fee required.

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**ATHLETIC TRAINING**

**ATTR 100  Athletic Taping and Bracing (3 credits)**
This course is designed for students who wish to apply to the Athletic Training Education Program (ATEP). Content will include basic athletic taping and bracing techniques commonly used to prevent athletic related injuries in the physically active population. Students will be educated on the variety of protective equipment that is utilized in athletic populations in addition to rehabilitative settings. Students will be expected to complete specific taping, bracing and padding techniques as well as equipment inspection, fitting and removal at a competent level prior to being accepted into the athletic training education program. Offered once each semester.

**ATTR 112  Sports First Aid (3 credits)**
This class is designed for individuals working with physically active people to provide instruction in, and application of, emergency first aid treatment for sports-related injuries and conditions. Guidelines for injury prevention will be discussed. Upon successful completion of this course students will be certified in CPR/AED for the Professional Rescuer, Standard First Aid and Bloodborne Pathogens in accordance with the requirements of the American Red Cross. Two hours of lecture and two hours of laboratory weekly.

**ATTR 199  First Year Seminar (3 credits)**
Prerequisite: Open to all freshmen with a writing placement score of 3 or above or a SAT score of 500 or above. Students with 24 or more transfer credits will have this requirement waived
First Year Seminars (FYS) are writing-intensive topic courses that introduce students to academic thought, discourse and practices. FYS courses prepare and orient students toward productive and fulfilling college careers by actively engaging them in a specific academic area of interest. Students will improve their writing, reading, research and basic information and technology skills while learning to work both collaboratively and independently. These courses will fulfill the First Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one FYS course may be taken for credit. (CFYS)

**ATTR 240  Introduction to Athletic Training (3 credits)**
Prerequisite: PHED 100
This course introduces the athletic training major into the field of athletic training including their role in providing sports injury management, taping and use of immobilization devices, basic injury evaluation and rehabilitation principles. Two hours of lecture and two hours of laboratory weekly.

**ATTR 241  Level I Clinical Experience in Athletic Training (3 credits)**
Prerequisite: Consent of the coordinator of the athletic training concentration
This clinical class will introduce the athletic training student into the clinical aspect of the athletic training profession. Observational hours will focus on the traditional athletic training work environment and will be augmented with weekly seminars on issues necessary to become a successful athletic trainer.

**ATTR 298  Second Year Seminar (Speaking Intensive) (3 credits)**
Prerequisite: _ _ _ _ 199; Open to all sophomores and juniors who have completed ENGL 101, and the speaking skills requirement. Students with 54 or more transfer credits will have this requirement waived. Cannot be taken if _ _ _ _ 299 is taken for credit.

Second Year Seminars (SYS) are speaking-intensive topic courses that build on the academic skills and habits introduced in the First Year Seminar. SYS courses engage students in a specific academic area of interest and provide them with the opportunity to reinforce, share and interpret knowledge. Students will improve their speaking, reading, research and basic information and technology skills while building the connections between scholarship and action that are required for lifelong learning. These courses will fulfill the Second Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one SYS course may be taken for credit. (CSYS)

ATTR 299 - Second Year Seminar (Writing Intensive) (3 credits)
Prerequisite: _ _ _ _ 199; Open to all sophomores and juniors who have completed ENGL 101 and ENGL 102. Students with 54 or more transfer credits will have this requirement waived. Cannot be taken if _ _ _ _ 298 is taken for credit.

Second Year Seminars (SYS) are writing-intensive topic courses that build on the academic skills and habits introduced in the First Year Seminar. SYS courses engage students in a specific academic area of interest and provide them with the opportunity to reinforce, share and interpret knowledge. Students will improve their writing, reading, research and basic information and technology skills while building the connections between scholarship and action that are required for lifelong learning. These courses will fulfill the Second Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one SYS course may be taken for credit. (CSYS)

ATTR 340 Sports Injury Management – Lower Extremity (3 credits)
Prerequisite: ATTR 240 and BIOL 252
This course is an intensive study into the assessment techniques utilized in the evaluation of athletic injuries and illnesses occurring to the lower extremity. Students must be able to apply and demonstrate evaluative skills and knowledge of joint and muscular musculoskeletal anatomy related to the pathology and management of specific injuries and conditions associated with the lower extremity. Two hours of lecture and two hours of laboratory weekly. Addenda: This course has been changed effective spring 2012. See the Catalog Addenda section of this publication for detailed information.

ATTR 341 Sports Injury Management – Upper Extremity (3 credits)
Prerequisite: ATTR 240
This course is an intensive study into the assessment techniques utilized in the evaluation of athletic injuries and illnesses occurring to the upper extremity and torso. Students must be able to apply and demonstrate evaluative skills and knowledge of joint and muscular musculoskeletal anatomy related to the pathology and management of specific injuries and conditions associated with the upper extremity and torso. Two hours of lecture and two hours of laboratory weekly. Addenda: This course has been changed effective spring 2012. See the Catalog Addenda section of this publication for detailed information.

ATTR 342 Level II Clinical Experience in Athletic Training (3 credits)
Prerequisite: ATTR 241
This clinical class will introduce the athletic training student to basic and intermediate skills and techniques in the athletic training profession. Through appropriate clinical rotations, students will learn clinical competencies under the direction of a certified athletic trainer. The experience will be augmented with regular seminars on issues and topics pertinent to the entry-level professional.

ATTR 343 Level III Clinical Experience in Athletic Training (3 credits)
Prerequisite: ATTR 241
This clinical class will introduce the athletic training student into the clinical aspect of the athletic training profession. Observational hours will focus on the traditional athletic training work environment and will be augmented with weekly seminars of issues necessary to become a successful athletic trainer. Addenda: This course has been changed effective spring 2012. See the Catalog Addenda section of this publication for detailed information.

ATTR 410 Nutritional Concepts for Health Care Practitioners (3 credits)
This course will provide an overview of nutrition principles and strategies for the health care practitioner. Students will learn and apply the techniques required to complete a nutrition assessment and they will explore various nutrition issues that confront the health care practitioner. (CWRM) Addenda: This course has been changed effective spring 2012. See the Catalog Addenda section of this publication for detailed information.

ATTR 442 Therapeutic Exercise (3 credits)
Prerequisite: Must be accepted into the Athletic Training Program or by consent of the program director
This course is a comprehensive analysis of therapeutic exercise in a sports medicine environment. Topics discussed include the healing process and pathophysiology of a musculoskeletal injury, goals of rehabilitation, flexibility and strength training methods and protocol,
aquatic therapy, pharmacological considerations, psychological considerations and specific rehabilitation techniques for the various body segments. Two hours of lecture and two hours of laboratory weekly. *May be taken for graduate-level credit.* Addenda: This course has been changed effective spring 2012. See the Catalog Addenda section of this publication for detailed information.

**ATTR 443  Pharmacology for the Physically Active (1 credit)**  
**Prerequisite:** ATTR 340  
This course is designed to provide students with an overview of pharmacology and how it relates to the physically active individual. Therapeutic medications, supplements, performance-enhancing drugs and drug testing protocols will be discussed.

**ATTR 446  Medical Conditions and Disabilities of the Physically Active (2 credits)**  
**Prerequisite:** ATTR 340  
This course will provide the knowledge, skills and values that an entry-level athletic trainer must possess to recognize, treat, and refer, when appropriate, general medical conditions and disabilities seen in athletes and others involved in physical activity. Students will learn about and apply various general medical principles and practices as they relate to physically active populations.

**ATTR 450  Therapeutic Modalities (3 credits)**  
**Prerequisite:** ATTR 240  
This course will introduce the athletic training student to therapeutic modalities used in sports medicine. A one-hour lecture and two-hour laboratory will provide practical application of clinical skills including indications, contraindication and record keeping associated with patient care. *May be taken for graduate-level credit.* Addenda: This course has been changed effective spring 2012. See the Catalog Addenda section of this publication for detailed information.

**ATTR 454  Level IV Clinical Experience in Athletic Training (3 credits)**  
**Prerequisite:** ATTR 241  
This clinical class will focus on the learning over time process of demonstrating competence in the cognitive, psychomotor and affective domains in athletic training. Under the direction of a certified athletic trainer, students will begin to demonstrate mastery of specified competencies. The experience will be augmented with regular seminars on issues and topics pertinent to the entry-level professional. *May be taken for graduate-level credit.* Addenda: This course has been changed effective spring 2012. See the Catalog Addenda section of this publication for detailed information.

**ATTR 455  Level V Clinical Experience in Athletic Training (3 credits)**  
**Prerequisite:** ATTR 241  
This clinical class will culminate the learning over time process of demonstrating competence in the cognitive, psychomotor and affective domains in athletic training. The clinical experience will be enhanced with seminars pertinent to the entry-level professional. *May be taken for graduate-level credit.* Addenda: This course has been changed effective spring 2012. See the Catalog Addenda section of this publication for detailed information.

**ATTR 490  Administration of Athletic Training (3 credits)**  
**Prerequisite:** ATTR 240 or equivalent  
This course is a study of various administrative topics confronting an athletic trainer in the management of a sports medicine facility including program management, human resource management, financial management, facility design and planning, informational management, insurance and legal considerations in sports medicine. *Offered alternate years.* Addenda: This course has been changed effective spring 2012. See the Catalog Addenda section of this publication for detailed information.

**ATTR 499  Directed Study in Athletic Training (3 credits)**  
**Prerequisite:** Consent of department; formal application required  
Directed study is open to all juniors and seniors who have demonstrated critical and analytical abilities in their studies and who wish to pursue a project independently. This course may be taken for a maximum of six credits.

**ATTR 501  Athletic Training Project (3 credits)**  
**Prerequisite:** Matriculation in the MS in Athletic Training and consent of instructor  
Students will plan and implement an athletic training research or clinical based project. The project will culminate with an oral defense to the project committee. Topics must be relevant to the student's program of study, or have the potential to make a positive contribution to the athletic training discipline, or to facilitate the development or improvement of a program.

**ATTR 502  Research (3 or 6 credits)**  
**Prerequisite:** Consent of the department; formal application required  
Original research is undertaken by the graduate student in their field. For details, consult the paragraph titled “Directed or Independent Study” in the “College of Graduate Studies” section of this catalog. This course may be repeated for a maximum of six credits.
ATTR 503  Directed Study (1-3 credits)  
**Prerequisite:** Consent of the department chairperson; formal application required

Directed study is designed for the graduate student who desires to study selected topics in a specific field. For details, consult the paragraph titled “Directed or Independent Study” in the “College of Graduate Studies” section of this catalog. This course may be repeated for a maximum of six credits.

ATTR 510  Nutritional Concepts for Health Care Practitioners (3 credits)
This course will provide an overview of nutritional principles and strategies for the health care practitioner. Students will learn and apply the techniques required to complete a nutritional assessment, and they will explore various nutritional issues that confront their clients across the lifespan.

ATTR 511  Research Methods in Physical Education (3 credits)  
Cross Listed with PHED 511
This course will develop competencies needed to both produce and consume research in physical education and allied areas. In the development of a research proposal, students will gain an understanding of such research techniques as problem formulation, literature review, sampling, hypothesis construction, research design, instrumentation and data analysis. **Fall only.**

ATTR 540  Management of Lower Extremity Conditions (3 credits)  
**Prerequisite:** Acceptance into the Athletic Training Program

The course will focus on a critical analysis of sport-related injuries and conditions that may affect the lower extremity in physically active individuals. The application of joint and musculoskeletal anatomy will be utilized to assess the various joints and body regions of the lower extremity to determine the appropriate management of these sport-related conditions. Two hours of lecture and two hours of laboratory weekly.

ATTR 541  Management of Upper Extremity and Torso Conditions (3 credits)  
**Prerequisite:** ATTR 540

The course will focus on a critical analysis of sport-related injuries and conditions that may affect the upper extremity and torso in physically active individuals. The application of joint and musculoskeletal anatomy will be utilized to assess the various joints and body regions of the upper extremity and torso to determine the appropriate management of these sport-related conditions. Two hours of lecture and two hours of laboratory weekly.

ATTR 542  Therapeutic Exercise (3 credits)  
**Prerequisite:** Acceptance into the Athletic Training Program

This course is a comprehensive analysis of therapeutic exercise in a sports medicine environment. Topics discussed include the healing process and pathophysiology of a musculoskeletal injury, goals of rehabilitation, flexibility and strength-training methods and protocol, aquatic therapy, pharmacological considerations during rehabilitation, psychological considerations and specific rehabilitation techniques for the various body segments. Two hours of lecture and two hours of laboratory weekly.

ATTR 543  Pharmacology for the Physically Active (1 credit)
This course is designed to provide the student with an overview of pharmacology and how it relates to the physically active individual. Therapeutic medications, supplements, performance enhancing drugs and drug testing protocols will be discussed.

ATTR 546  Medical Conditions of the Physically Active (2 credits)
This course will provide the knowledge, skills, and values that an entry-level athletic trainer must possess to recognize, treat and refer, when appropriate, general medical conditions and disabilities seen in athletes and others involved in physical activity.

ATTR 548  Applied Biomechanics and Movement Analysis (3 credits)  
Cross Listed with PHED 546

This course provides students with a knowledge and understanding of the mechanical concepts underlying performance of motor skills. Focus is on analytic techniques, which allow students to analyze skills and effectively consume complex skill analyses conducted by others. **Fall semester, alternate years.**

ATTR 550  Therapeutic Modalities (3 credits)  
**Prerequisite:** Acceptance into the Athletic Training Program

This course will focus on the relationship of the electromagnetic and acoustic spectra, the principles of electricity, and nonmechanical modalities in the treatment of sports-related injuries and conditions. A two-hour lecture and two hour laboratory session will provide an opportunity for students to learn the indications, contraindications, application protocols and record keeping associated with patient care.

ATTR 560  Psychosocial Intervention and Patient Care (3 credits)
The goal of this course is to assist the practitioner in mastering competencies related to the psychosocial intervention and referral domain. Students will develop skills and gain knowledge that will assist them to recognize, intervene, and refer, when appropriate, patients exhibiting socio-cultural, mental, emotional, psychological and behavioral disorders and concerns.

**ATTR 561  Level I Clinical Experience in Athletic Training (3 credits)**
*Prerequisite: Consent of Athletic Training Program Director*
This clinical class will introduce the athletic training student to the clinical aspect of the athletic training profession. Observational hours will focus on the traditional athletic training work environment and will be augmented with an intensive seminar on basic practices necessary to become a successful athletic trainer.

**ATTR 562  Level II Clinical Experience in Athletic Training (3 credits)**
*Prerequisite: ATTR 561*
This clinical class will introduce the athletic training student to basic and intermediate skills and techniques used in the athletic training profession. Through appropriate clinical rotations, students will learn competencies under the direction of a certified athletic trainer. The experience will be augmented with regular seminars on issues and topics pertinent to the entry-level professional.

**ATTR 563  Level III Clinical Experience in Athletic Training (3 credits)**
*Prerequisite: ATTR 562*
This clinical class will introduce the athletic training student to intermediate and advanced skills and techniques used in the athletic training profession. Through appropriate clinical rotations, students will learn clinical competencies under the direction of a certified athletic trainer. The experience will be augmented with regular seminars on issues and topics pertinent to the entry-level professional.

**ATTR 564  Level IV Clinical Experience in Athletic Training (3 credits)**
*Prerequisite: ATTR 563*
This clinical class will focus on the learning over time process of demonstrating competence in the cognitive, psychomotor and affective domains in athletic training. Under the direction of a certified athletic trainer, students will begin to demonstrate mastery of specific competencies. The experience will be augmented with regular seminars on issues and topics pertinent to the entry-level professional.

**ATTR 565  Level V Clinical Experience in Athletic Training (3 credits)**
*Prerequisite: ATTR 564*
This clinical class will culminate the learning over time process of demonstrating competence in the cognitive, psychomotor and affective domains in athletic training. The clinical experience will be enhanced with seminars pertinent to the entry-level professional.

**ATTR 590  Administration in Athletic Training (3 credits)**
*Prerequisite: ATTR 563*
This course is a study of various topics involved in the management of an athletic training facility including program management, human resource management, financial management, facility design and planning, informational management, public relations, insurance and legal considerations in athletic training. Standards and practices of the athletic training professional will also be discussed. These experiences are developed through lectures, demonstrations and discussions with professionals in the field including athletic trainers, physicians, physician assistants and lawyers. *Offered alternate years.*

### AVIATION SCIENCE

**AVSC 100  Private Pilot Flight (3 credits)**
*Prerequisite: AVSC 105 which may be taken concurrently*
This course consists of flight instruction and ground tutoring, aircraft systems, flight planning, solo and cross-country flight, flight maneuvers, VFR navigation, introduction to night flight and emergency operations. The Private Pilot Flight course prepares the student for the FAA Private Pilot Certificate.

**AVSC 105  Private Pilot Ground School (6 credits)**
Topics include basic performance and aerodynamics of the airplane, airplane structure and systems, flight control and instruments, weight and balance, airports, communications, air traffic control, meteorology and Federal Aviation Regulations. Aeronautical charts, airspace, radio navigation including VOR, DME, ADF, radar and transponders A.I.M. are considered, as well as use of the flight computer, cross-country flight planning and medical factors of flight. Students who meet Federal Aviation Administration (FAA) requirements will be qualified to take the FAA written examination. *Either semester.*
AVSC 135  Freshman Honors Colloquium (1 credit)
Prerequisite: Open to Commonwealth Honors students and to others at the discretion of the instructor
Freshman Honors Colloquia in aviation allow exceptionally able students to explore a challenging topic in small classes under close faculty supervision. Colloquia meet once a week for 50 minutes and culminate in a paper or scientific project, which provides the major part of the grade. Topics vary from semester to semester.

AVSC 136  Freshman Honors Colloquium (1 credit)
Prerequisite: Open to Commonwealth Honors students and to others at the discretion of the instructor
Freshman Honors Colloquia in aviation allow exceptionally able students to explore a challenging topic in small classes under close faculty supervision. Colloquia meet once a week for 50 minutes and culminate in a paper or scientific project, which provides the major part of the grade. Topics vary from semester to semester.

AVSC 199  First Year Seminar (3 credits)
Prerequisite: Open to all freshmen with a writing placement score of 3 or above or a SAT score of 500 or above or who have completed ENGL 101. Students with 24 or more transfer credits will have this requirement waived.
First Year Seminars (FYS) are writing-intensive topic courses that introduce students to academic thought, discourse and practices. FYS courses prepare and orient students toward productive and fulfilling college careers by actively engaging them in a specific academic area of interest. Students will improve their writing, reading, research and basic information and technology skills while learning to work both collaboratively and independently. These courses will fulfill the First Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one FYS course may be taken for credit. (CFYS)

AVSC 200  Instrument Flight (4 credits)
Prerequisite: AVSC 100; and AVSC 212, which may be taken concurrently
This course is a review and practice of basic, advanced and precision flight maneuvers and concentrated instrument flight instruction including IFR navigation. Emphasis is placed on aircraft control, IFR flight planning, departure, enroute, holding and arrival procedures, instrument approaches, IFR procedures and regulations.

AVSC 211  Commercial Pilot Ground School (3 credits)
Prerequisite: AVSC 200 and AVSC 212
Subject matter involves advanced treatment of the airplane systems, performance and control, the National Airspace System, Federal Aviation Regulations, meteorology, radio navigation and the physiology of flight. Students who meet Federal Aviation Administration (FAA) requirements will be qualified to take the FAA written examination. Either semester. Addenda: This course has been changed effective spring 2012. See the Catalog Addenda section of this publication for detailed information.

AVSC 212  Instrument Pilot Ground School (3 credits)
Prerequisite: AVSC 100 and AVSC 105
Topics include discussion of aircraft environmental control systems and commercial flight planning, study of instrument flight charts, IFR departure, enroute and approach procedures. FARs and IFR Flight Planning. Students who meet Federal Aviation Administration (FAA) requirements will be qualified to take the FAA written examination. Either semester.

AVSC 215  Single Engine Flight Simulator Instruction (1-3 credits)
Prerequisite: AVSC 105 or consent of instructor
Single engine flight simulated instruction is conducted with the use of a flight simulator located at the New Bedford airport. The course content will be determined in accordance with the flight experience of the student. A student must enroll for a minimum of one credit. The course may be repeated for a maximum of three credits. (Fifteen hours of instruction are required for one credit.) Either semester.

AVSC 286  Sophomore Honors Colloquium (1 credit)
Prerequisite: Open to all Commonwealth Honors students and to others at the discretion of the instructor
Sophomore Honors Colloquia in aviation allow exceptionally able students to explore a challenging topic in small classes under close faculty supervision. Colloquia meet once a week for 50 minutes and culminate in a paper or scientific project, which provides the major part of the grade. Topics vary from semester to semester.

AVSC 287  Sophomore Honors Colloquium (1 credit)
Prerequisite: Open to all Commonwealth Honors students and to others at the discretion of the instructor
Sophomore Honors Colloquia in aviation allow exceptionally able students to explore a challenging topic in small classes under close faculty supervision. Colloquia meet once a week for 50 minutes and culminate in a paper or scientific project, which provides the major part of the grade. Topics vary from semester to semester.

AVSC 298  Second Year Seminar (Speaking Intensive) (3 credits)
Prerequisite: AVSC 200 and AVSC 211, which may be taken concurrently
Lessons include a review of basic flight maneuvers, as well as concentrated instruction and solo proficiency practice in precision flight maneuvers. Introduction to flight in complex aircraft, experience in night and cross-country flying, with altitude instrument flying. This course also consists of a complete review of all commercial maneuvers, instrument flying techniques, procedures and regulations. The Commercial Flight course prepares the student for FAA Commercial Pilot and Instrument ratings.

AVSC 303 Flight Instructor Ground School (3 credits)
Prerequisite: AVSC 200 and AVSC 212 and AVSC 300 and AVSC 211
This course provides aviation instructors with easily understood learning and teaching information and its use in their task of conveying aeronautical knowledge and skills to students. Topics include aspects of human behavior, teaching methods and communication, evaluation and criticism, instructional planning, instructor characteristics and responsibilities. Students who meet Federal Aviation Administration (FAA) requirements will be qualified to take the FAA written examination. Either semester.

AVSC 305 Introduction to General Aviation Management (3 credits)
Prerequisite: MGMT 130 and junior status; or consent of instructor
This course is an in-depth study of Fixed Base Operations (FBO) business management and operations including financial aspects, human resources, MIS, flight line, flight operations, marketing, maintenance and facilities. Either semester.

AVSC 307 Air Carrier Operations (3 credits)
Prerequisite: MGMT 130 and junior status; or consent of instructor
This course is an in-depth study of the U.S. air carrier industry, its structure and its place in the aerospace industry. The history, economics, management and regulation of the domestic air carrier industry are examined in detail. Fall semester.

AVSC 310 Aviation Safety (3 credits)
Prerequisite: AVSC 100 and AVSC 105
The primary emphasis of this course is to instill safety consciousness. It encompasses the role of federal organizations involved with aviation safety and stresses their contributions to the aerospace industry. The course will explore flight physiology, utilization of aeronautical services and facilities, a historical perspective and analyzing documented case studies. Spring semester.

AVSC 316 Multi-Engine Flight Simulator Instruction (1-3 credits)
Prerequisite: AVSC 413 or consent of instructor
Multi-engine flight simulated instruction is conducted with the use of a flight simulator at the New Bedford airport. The course content will be determined in accordance with the flight experience of the student. Students must enroll for a minimum of one credit. The course may be repeated for a maximum of three credits. (Fifteen hours of instruction are required for one credit.) Either semester.

AVSC 320 Aviation Regulatory Process (3 credits)
Prerequisites: AVSC 105 and junior status; or consent of instructor
This course is a study of the development of the United States aviation regulatory process, its current structure, the rule-making process, the appeals process, ICAO, etc., as well as an exposure to current aviation law as it applies to aviators and operators in the airspace system. Either semester.
AVSC 330  Aircraft Systems (3 credits)
Prerequisites: AVSC 211 and junior status; or consent of instructor
This course is an examination of current aircraft systems moving from the more elementary systems found in smaller general aviation aircraft to the more complex systems found in current turbine powered transport category aircraft. These systems will include power plant, electrical, flight control, air conditioning and pressurization, ice and rain protection, oxygen, avionics and emergency equipment. Fall semester.

AVSC 399  Special Topics in Aviation (3 credits)
Prerequisite: AVSC 105
This course will cover timely and important aviation issues not offered in other courses. Topics will change semester by semester and will be announced prior to registration. This course may be repeated with permission of department.

AVSC 400  Instructional Flight (3 credits)
Prerequisite: AVSC 200 and AVSC 211 and AVSC 212 and AVSC 300; and AVSC 303, which may be taken concurrently
This course includes analysis of flight maneuvers, take-offs, landings, stalls, emergencies and procedures, as well as analysis and practice instruction of advanced maneuver, altitude instrument flying, considerations of night flight, aircraft performance, cross-country flight and navigation. Practice flight and ground instruction. It prepares the student for the FAA Certified Flight Instructor rating.

AVSC 402  Insurance and Risk Management in Aviation (3 credits)
Prerequisite: AVSC 305
This course is a practical study of U.S. regulations governing aviation and a survey of appropriate risk management policies of aviation. The case method is employed to present practical applications of principles under consideration. Fall semester.

AVSC 407  Aviation Marketing Management (3 credits)
Prerequisite: AVSC 100 and AVSC 305
Selling and pricing business aviation services and creative marketing strategy are studied in an analytical approach to advertising, sales force administration, promotion, distribution, retailing, logistics, wholesaling, product planning, price policies, market research and consumer behavior. Fall semester.

AVSC 411  Instrument Flight Instructor Ground School (2 credits)
Prerequisite: AVSC 300 and AVSC 211; and AVSC 303, which may be taken concurrently
This course will prepare students for the Federal Aviation Administration (FAA) instrument flight and ground instructor written examinations.

AVSC 412  Instrument Flight Instructor Flight Training (2 credits)
Prerequisite: AVSC 411, which may be taken concurrently
Teaching analysis of altitude instruments, instrument approaches, and enroute operations are covered. This course will prepare students for the Federal Aviation Administration (FAA) practical test. Two two-hour lecture/demonstration periods weekly for one quarter. Either semester.

AVSC 413  Multi-Engine Rating Ground School (1 credit)
Prerequisite: AVSC 211 and AVSC 300
This course prepares the prospective multi-engine pilot for the flight portion of the Federal Aviation Administration (FAA) multi-engine certification, including an in-depth study of multi-engine aerodynamics, systems, weight and balance, performance and emergencies.

AVSC 414  Multi-Engine Flight Training (1 credit)
Prerequisite: AVSC 413
This course prepares the prospective multi-engine pilot for the Federal Aviation Administration (FAA) multi-engine flight test. It includes multi-engine maneuvers, systems, weight and balance and emergencies. Two one-hour lecture/demonstration periods weekly for one quarter. Either semester.

AVSC 417  Multi-Engine Instructor Flight Training (2 credits)
Prerequisite: AVSC 303 and AVSC 400 and AVSC 413 and AVSC 414; and AVSC 416, which may be taken concurrently
This course covers the development of aeronautical skill and experience in multi-engine aircraft as well as acquisition of teaching proficiency from right seat of multi-engine airplane. One two-hour lecture/demonstration period weekly for one quarter. Either semester.

AVSC 450  Human Factors in Aviation (3 credits)
Prerequisite: AVSC 310 and junior status; or consent of instructor
This course provides a study in the "human aspects" that affect the interaction of man with machine and technology in the aviation
environment. Topics will include analysis of human/machine interfaces in the aircraft design environment, in the cockpit environment and in the air traffic control environment.

AVSC 471 Aviation Management (3 credits)
Prerequisite: AVSC 307 and AVSC 402 and AVSC 407 and senior status; or consent of instructor
This capstone course uses the tools and concepts mastered in each of the previous aviation courses to look at current business problems and topics related to the aviation industry.

AVSC 485 Honors Thesis (3 credits)
Prerequisite: Open to all Commonwealth and Departmental Honors students and to others at the discretion of the instructor
One-hour weekly meetings with the thesis director will culminate in an honors thesis. With the consent of the Departmental Honors Committee and the thesis director, this course may be extended into a second semester for three additional credits depending upon the scope of the project. Whether the final version of the thesis qualifies the student to graduate with honors will be determined by the Departmental Honors Committee.

AVSC 498 Internship in Aviation Science (3-15 credits)
Prerequisite: Consent of the department chairperson of aviation science; formal application required
The internship is an instructive endeavor in the aviation industry or an aviation related business, which complements the academic program. The student will receive meaningful and practical work experience conducted at an airline, a Fixed Base Operation (FBO), the FAA, an aviation consulting firm or other aviation related firms. This course may be repeated for a maximum of 15 credits. Either semester.

AVSC 499 Directed Study in Aviation Science (1-3 credits)
Prerequisite: Junior status and consent of the department; formal application required
Directed study is open to junior and senior majors who have demonstrated critical and analytical abilities in their studies and who wish to pursue a project independently. This course may be taken twice for a maximum of six credits. Offered either semester.

Aviation Science: Other Approved Courses

AVSC 217 Air Traffic Control (3 credits)
Prerequisite: AVSC 105 and AVSC 100, both of which may be taken concurrently
This course deals with the U.S. air traffic and airway system as it exists today. Topics of discussion will include: components of the system, air route traffic control centers, towers, flight service stations, navigational aids and the low/high altitude federal airway structure.

AVSC 350 Airport Management (3 credits)
Prerequisite: MGMT 130 and junior status; or consent of instructor
This course is a study of managerial challenges associated with the operations of an airport. The course examines the history of airport development in the U.S., pertinent developments in legislation, planning, funding, local controlling authorities, growth management, regulatory aspects and public relations.

AVSC 416 Multi-Engine Instructor Ground School (2 credits)
Prerequisite: AVSC 303 and AVSC 400 and AVSC 413 and AVSC 414
This course involves techniques of teaching multi-engine flight, multi-engine operations and systems, aerodynamics of multi-engine flight, environmental systems and multi-engine airplane instruction. One two-hour lecture/demonstration period weekly.

BIOLOGICAL SCIENCES

BIOE 511 Advanced Biological Topics and Techniques (1-3 credits)
Designed for secondary education science teachers, this course is composed of three one credit “short courses.” Short course topics will vary and will also serve the continuing needs of teachers for professional development. Possible topics could include whales of Massachusetts, isolation of plasmids, fungal genetics, spring migratory birds, freshwater macroinvertebrates of local ponds and streams, New England wetland plants, intertidal invertebrates, New England wildflowers, etc. This course may be repeated for different topics.

BIOE 513 Advances in Cell/Molecular Biology (3 or 4 credits)
This graduate-level course designed for secondary education science teachers will cover subject areas of cell and molecular biology. Possible subject area components could include molecular biology, techniques of molecular biology, microbiology, embryology, cytology, biological electron microscopy, the foundations of biology, biology of the fungi, virology, human genetics, advanced cellular biology and advanced developmental biology. This course may be repeated for different topics. Laboratory may be included.
BIOE 514  Advances in Biomedical/Physiological Biology (3 or 4 credits)
This graduate-level course designed for secondary education science teachers will cover subject areas of biomedical and physiological biology. Possible subject area components could include embryology, parasitology, neurobiology and advanced physiology. This course may be repeated for different topics. Laboratory may be included.

BIOE 515  Advances in Ecological/Environmental Biology (3 or 4 credits)
Designed for secondary education science teachers, this course will cover subject areas in ecological and environmental biology. This course may be repeated for different topics. Laboratory may be included.

BIOL 100  General Principles of Biology (4 credits)
The biological principles at the cellular and organismal levels are discussed. The topics covered include cell structure, respiration, photosynthesis, osmosis, enzymes, DNA and protein synthesis, genetics, ecology and evolution. Three hours of lecture and one two-hour laboratory period weekly. Offered every semester. (CNSL)

BIOL 102  Introduction to Zoology (4 credits)
This course considers the zoological aspects of biology with emphasis on human systems. Topics include the chemical basis of life, the structure and physiology of cells, tissues, organs and organ-systems, embryonic development, heredity, evolution and ecology. Three hours of lecture and one two-hour laboratory period weekly. Offered every semester. (CNSL)

BIOL 110  Biology: A Human Approach (3 credits)
This course examines biological principles as they apply to the human biology and to the role of humans in nature. A study of different levels of organization leads to analysis of the structure and function of the major systems of the human body. Topics will include human heredity, evolution and ecology. Spring semester. (CNSN)

BIOL 111  Human Heredity (3 credits)
The principles of genetics, which are important to an understanding of the hereditary mechanism in humans are covered. Individual differences in relation to gene-environment interaction and the role of heredity in society, behavior, health and disease are discussed. This course is primarily an elective for non-science majors.

BIOL 112  Biology and Human Thought (3 credits)
The development of the fetal brain, its cellular structures and organization and the functions associated with various brain regions will be discussed. Major emphasis will be devoted to neuronal cell conduction and transmission and the cellular basis for movement, sensory activity, emotions, memory and language production. In addition, students will explore a variety of brain and neurological disorders. Three hours of lecture weekly. (CNSN)

BIOL 115  Microbial World and You (3 credits)
This course considers microorganisms (bacteria, algae, fungi, protozoa, and viruses) and their interactions with humans. The principles and applications of environmental, industrial and medical microbiology are discussed. Either semester. (CNSN)

BIOL 117  Environmental Biology (4 credits)
Ecological relationships and current environmental issues are explored in class with a focus on how biological systems function and what impacts humans have had on global biodiversity. Class discussions and short video clips from Nature, CNN and CBC news explore the human impact on harvesting renewable and nonrenewable resources, biogeochemical cycles, human population growth, threats to endangered species, global climate change, sustainable use of renewable resources and local impacts on global biodiversity. Class discussions, laboratory exercises and team projects highlight examples taken from outside the United States and particularly case studies drawn from Canada and regions of Southeast Asia. Laboratory exercises emphasize making observations and using quantitative reasoning to study effects of environmental factors on organisms; using computer models to study harvest impacts on world fisheries; and case studies to examine water use and world health issues. Three hours of lecture and one two-hour laboratory weekly. (CNSL)

BIOL 119  The Botanical World (3 credits)
This course is an introduction to the biology of plants, exploring their diversity, peculiar adaptations, associations with animals, practical uses and the profound effect they have had on modern civilization. (CNSN)

BIOL 121  General Biology I (4 credits)
This core course in the Biology major is an introduction to the concepts of molecular and cellular biology, reproduction, metabolism, genetics and mechanisms of evolution. Three hours of lecture and one three-hour laboratory weekly. Fall semester. (CNSL)

BIOL 122  General Biology II (4 credits)
Prerequisite: BIOL 121 with a minimum grade of “C-” or BIOL 100 or BIOL 102 with a minimum grade of “B-”; or equivalent
This course is a survey of the major groups of organisms, their morphology, physiology, evolution and ecology. Three hours of lecture and one three-hour laboratory weekly. Spring semester.

BIOL 128 The Biology of Human Sexuality (3 credits)
The Biology of Human Sexuality is designed to introduce students to the basics of the human reproductive system. Students will develop a healthy understanding of sexuality, its role in society and how it applies to our daily life. Three hours of lecture per week. (CNSN)

BIOL 199 First Year Seminar (3 credits)
Prerequisite: Open to all freshmen with a writing placement score of 3 or above or a SAT score of 500 or above or who have completed ENGL 101. Students with 24 or more transfer credits will have this requirement waived.
First Year Seminars (FYS) are writing-intensive topic courses that introduce students to academic thought, discourse and practices. FYS courses prepare and orient students toward productive and fulfilling college careers by actively engaging them in a specific academic area of interest. Students will improve their writing, reading, research and basic information and technology skills while learning to work both collaboratively and independently. These courses will fulfill the First Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one FYS course may be taken for credit. (CFYS)

BIOL 200 Cell Biology (4 credits)
Prerequisite: BIOL 121 with a minimum grade of “C-” or BIOL 100 or BIOL 102 with a minimum grade of “B-”; or equivalent; and CHEM 131 or CHEM 141, and CHEM 132 or CHEM 142 or concurrent enrollment; or consent of instructor
This course is an introduction to the basic concepts in cell structure and cell physiology. Topics will include the function of cellular organelles, enzymes and cell metabolism, the synthesis of macromolecules and the flow of genetic information in the cell, including transcription and translation. Three hours of lecture and one three-hour laboratory period weekly. Spring semester.

BIOL 225 General Ecology (4 credits)
Prerequisite: BIOL 121 with a minimum grade of “C-” or BIOL 100 or BIOL 102 with a minimum grade of “B-”; or equivalent; and CHEM 131 or CHEM 141 either taken previously or concurrently; or consent of instructor
Fundamentals of the interactions of populations, communities and ecosystems are investigated in lecture are covered. Students will be acquainted with techniques of data gathering and analysis in ecology. Laboratory trips will allow students to investigate ecological communities in Southeastern Massachusetts. One all day Saturday field trip will be required as part of the lab. Three hours of lecture and one three-hour laboratory period weekly. Fall semester.

BIOL 243 Systematic Botany (4 credits)
Prerequisite: BIOL 121 with a minimum grade of “C-” or BIOL 100 or BIOL 102 with a minimum grade of “B-”; or consent of instructor
This course includes lecture presentations in the identification, naming and classification of higher plants. The laboratory will focus on acquiring skills in plant identification with an emphasis on the flora of Massachusetts. Three hours of lecture and one three-hour laboratory period weekly.

BIOL 251 Human Anatomy and Physiology I (4 credits)
Prerequisite: BIOL 100 or BIOL 102 with a minimum grade of “B-”; or BIOL 121 or BIOL 122 with a minimum grade of “C-”; or consent of instructor
This course is an intensive study of the biochemistry and cellular structures of tissues; the integumentary, skeletal and muscle systems; joints, fundamentals of the nervous system; the peripheral, central and autonomic nervous systems and the special senses. Three hours of lecture and one three-hour laboratory per week. Offered fall semester.

BIOL 252 Human Anatomy and Physiology II (4 credits)
Prerequisite: BIOL 100 or BIOL 102 with a minimum grade of “B-”; or BIOL 121 or BIOL 122 with a minimum grade of “C-”; and BIOL 251 with a minimum grade of “C-”; or consent of instructor
This course is an intensive study of the structure and function of the heart, circulatory system and blood; and the organ systems including lymphatic, endocrine, respiratory, digestive and reproductive systems. Three hours of lecture and one three-hour laboratory per week. Offered spring semester.

BIOL 284 Invertebrate Zoology (4 credits)
Prerequisite: BIOL 121 with a minimum grade of “C-” or BIOL 100 or BIOL 102 with a minimum grade of “B-”; and BIOL 122 with a minimum grade of “C-” or equivalent; or consent of instructor
This course covers the biology of invertebrates from a phylogenetic standpoint with emphasis on taxonomy, morphology, physiology, development and natural history. Representatives of the principal classes of each phylum are studied. Three hours of lecture and three hours of laboratory weekly. In alternate spring semesters, either BIOL 284 or BIOL 382 will be offered.
BIOL 293  Service-Learning in Biology (1 credit)
Prerequisite: Successful completion of at least two biology courses, and either a minimum GPA in biology of 2.5 or an overall GPA of 2.5 and consent of the department
Service-learning includes community based experiences such as laboratory or occupational experience in conservation with state or local agencies as well as industrial, allied health, educational, medical, governmental, recreational or regulatory experience with other organizations outside of the university. This course is a pre-internship experience designed to combine fieldwork with service for a total of 40 hours. Students will meet periodically with the course instructor to reflect on experiences and connect with curriculum content. No more than three credits may be used toward the biology major electives. Graded on a (P) Pass/(N) No Pass basis.

BIOL 297  Biometry (4 credits)
Prerequisite: MATH 100 or MATH 141 or MATH 151; and BIOL 225 with a minimum grade of “C-” taken previously or concurrently; or consent of instructor
This course is an introduction to the general principles and use of statistical analyses in the biological sciences. Topics include probability theory, characterization of data with descriptive statistics, sampling error, elements of experimental design, and hypothesis testing, emphasizing the philosophy and assumptions of statistical analysis as well as the mechanics. The course uses SPSS as a computing tool and will require a final project. Three hours of lecture and one three-hour laboratory period weekly. (CQUR) ) Addenda: This course has been changed effective spring 2012. See the Catalog Addenda section of this publication for detailed information.

BIOL 298  Second Year Seminar (Speaking Intensive) (3 credits)
Prerequisite: _ _ _ _ 199; Open to all sophomores and juniors who have completed ENGL 101, and the speaking skills requirement. Students with 54 or more transfer credits will have this requirement waived. Cannot be taken if _ _ _ _ 299 is taken for credit.
Second Year Seminars (SYS) are speaking-intensive topic courses that build on the academic skills and habits introduced in the First Year Seminar. SYS courses engage students in a specific academic area of interest and provide them with the opportunity to reinforce, share and interpret knowledge. Students will improve their speaking, reading, research and basic information and technology skills while building the connections between scholarship and action that are required for lifelong learning. These courses will fulfill the Second Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one SYS course may be taken for credit (CSYS)

BIOL 299  Second Year Seminar (Writing Intensive) (3 credits)
Prerequisite: _ _ _ _ 199; Open to all sophomores and juniors who have completed ENGL 101 and ENGL 102. Students with 54 or more transfer credits will have this requirement waived. Cannot be taken if _ _ _ _ 298 is taken for credit.
Second Year Seminars (SYS) are writing-intensive topic courses that build on the academic skills and habits introduced in the First Year Seminar. SYS courses engage students in a specific academic area of interest and provide them with the opportunity to reinforce, share and interpret knowledge. Students will improve their writing, reading, research and basic information and technology skills while building the connections between scholarship and action that are required for lifelong learning. These courses will fulfill the Second Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one SYS course may be taken for credit. (CSYS)

BIOL 320  Biochemistry (3 credits)
Prerequisite: BIOL 200 with minimum grade of “C-”; CHEM 131-132 or CHEM 141-142; MATH 141; or consent of the instructor. A course in physiology recommended, e.g., BIOL 252, BIOL 280, BIOL 341 or BIOL 373
This course is a study of the characteristics and metabolism of biological molecules. Topics include enzyme structure and function; techniques of enzyme study; anabolic and catabolic pathways and their regulation; and applications of thermodynamics and kinetics to biological systems. Three hours of lecture weekly.

BIOL 321  Genetics (4 credits)
Prerequisite: BIOL 121 with a minimum grade of “C-” or BIOL 100 or BIOL 102 with a minimum grade of “B-”; and BIOL 122 with a minimum grade of “C-” or equivalent; and BIOL 200 with a minimum grade of “C-” or equivalent; and CHEM 131-132 or CHEM 141-142; or consent of instructor
This course presents an analysis of the basic principles underlying heredity and the mechanisms involved in the replication, recombination, mutation, variation and expression of genetic material in representative plant, animal and microbial systems. Three hours of lecture and one three-hour laboratory period weekly. Fall semester.

BIOL 325  Ichthyology (4 credits)
Prerequisite: BIOL 121 with a minimum grade of “C-” or BIOL 100 or BIOL 102 with a minimum grade of “B-”; and BIOL 225 with a minimum grade of “C-”; and CHEM 131 or CHEM 141 taken previously or concurrently; or consent of instructor
Lecture presentations in ichthyology will examine the key aspects of anatomy, sensory systems, organ systems, physiology and ecology of fishes. Emphasis will be placed on identification of New England freshwater and coastal fishes. Field investigations will focus on the behavior and ecology of the fish populations in the Taunton River system. Laboratory sessions will also include techniques of age and
growth analysis for assessment of local fish populations, and basic identification of external and internal anatomy of various teleosts. Three hours of lecture and one three-hour laboratory per week.

**BIOL 326  Marine Biology (4 credits)**  
*Prerequisite: BIOL 122 with a minimum grade of “C-”; and BIOL 225 with a minimum grade of “C-” or equivalent; or consent of instructor*  
This course is an introduction to the marine ecosystems with emphasis on factors involved in the growth, diversity, and distribution of populations occupying the marine habitats of the eastern Atlantic coast. Three hours of lecture and three hours of laboratory weekly. *Offered once in three years.*

**BIOL 327  Wetlands Ecology (4 credits)**  
*Prerequisite: BIOL 225 with a minimum grade of “C-” or consent of instructor*  
This course is an examination of the composition, structure, function and value of wetland ecosystems in North America. The course constitutes a comparative analysis of characteristic biota and adaptations, hydrological and geochemical processes, and conservation strategies of wetlands through lecture, discussion, field work and direct experimentation. Three hours of lecture and one three-hour laboratory period weekly. *Offered alternate fall semesters. Addenda: This course has been changed effective spring 2012. See the Catalog Addenda section of this publication for detailed information.*

**BIOL 328  Stream Ecology (4 credits)**  
*Prerequisite: BIOL 225 with a minimum grade of “C-”; and CHEM 131 or CHEM141 taken previously or concurrently; or MATH 100 and MATH 141 or MATH 151 or consent of instructor*  
This course examines factors affecting the population size and distribution of aquatic organisms in streams and the biotic indices used to assess stream communities. Laboratory and field projects apply basic skills of organism identification, biotic indices and GIS to investigate aquatic communities of a local river. Three hours of lecture and one three-hour laboratory per week. *Offered every other year in the fall semester. (CWRM) Addenda: This course has been changed effective spring 2012. See the Catalog Addenda section of this publication for detailed information.*

**BIOL 338  Honors Tutorial (3 credits)**  
*Prerequisite: Open to Commonwealth and Departmental Honors students*  
Special topics in biology are presented. Three hourly meetings weekly. *Fall semester.*

**BIOL 339  Honors Tutorial (3 credits)**  
*Prerequisite: Open to Commonwealth and Departmental Honors students*  
Special topics in biology are presented. Three hourly meetings weekly. *Spring semester.*

**BIOL 341  Plant Physiology (4 credits)**  
*Prerequisite: BIOL 121 with a minimum grade of “C-” or BIOL 100 or BIOL 102 with a minimum grade of “B-”; and BIOL 122 with a minimum grade of “C-”; and BIOL 200 with a minimum grade of “C-”; and CHEM 131-132 or CHEM 141-142; or consent of instructor*  
This course covers the growth and function of plants including cellular physiology, water relations, respiration, photosynthesis, nutrition, growth regulation and the influence of environment. Three hours of lecture and one three-hour laboratory period weekly. *Fall semester.*

**BIOL 350  Molecular Biology (4 credits)**  
*Prerequisite: BIOL 200 with a minimum grade of “C-”*  
This course will examine the molecular nature of biological processes. The structure and function of biological macromolecules will be examined along with the research methodologies and techniques currently utilized in this field. Six hours of lecture/ laboratory weekly. *Fall semester.*

**BIOL 360  Biological Clocks (3 credits)**  
*Prerequisite: BIOL 200 with a minimum grade of “C-” or BIOL 251 with a minimum grade of “C-”; or consent of instructor*  
This course is an introduction to the basic concepts of biological oscillations. The course will provide an understanding of the behavioral, genetic and anatomical aspects of the endogenous biological clock. An explanation of how circadian rhythms regulate and mediate cellular, behavioral and physiological processes of organisms will occur.

**BIOL 371  Histology (4 credits)**  
*Prerequisite: BIOL 200 with a minimum grade of “C-”*  
This course is a study of the microscopic anatomy of mammalian tissues and organs with emphasis on human materials. The study of prepared slides in the laboratory will serve as a basis for discussion of the interdependence of structure and function in the animal body. Three hours of lecture and one three-hour laboratory period weekly.

**BIOL 372  Animal Behavior (3 credits)**
This introduction to the study of animal behavior from the biological viewpoint covers such topics as drives and reflexes, animal communication, biological rhythms and migration. Emphasis will be placed, where applicable, on the relationships between animal and human behavior.

**BIOL 373   Animal Physiology (4 credits)**
Prerequisite: BIOL 121 with a minimum grade of “C-”; or BIOL 100 or BIOL 102 with a minimum grade of “B-”; and BIOL 122 with a minimum grade of “C-”; or equivalent or consent of instructor
Physiological principles concerned in irritability, contraction, circulation, gas exchange, excretion and hormonal regulation are studied. Special focus will be placed on unique physiological features found in a variety of animals. Topics will vary and may include hibernation, echolocation, communication through pheromones, bioluminescence and migration. Three hours of lecture and one three-hour laboratory period weekly. *Alternate spring semesters.*

**BIOL 375   Immunology (3 credits)**
Prerequisite: BIOL 200 with a minimum grade of “C-”; and BIOL 321 with a minimum grade of “C-”
The immune system and its components, including their structure, function, genetics and ontogeny are covered. Three hours of lecture weekly. *Offered alternate fall semesters.*

**BIOL 376   General Endocrinology (3 credits)**
Prerequisite: BIOL 200 with a minimum grade of “C-”
A survey of the morphology, ultrastructure, and physiology of endocrine glands and their hormones, in animals with special emphasis on humans, will be presented. The course will discuss the hormonal actions and their control on the cellular and organ level Three hours of lecture weekly.

**BIOL 382   Comparative Chordate Anatomy (4 credits)**
Prerequisite: BIOL 121 with a minimum grade of “C-” or BIOL 100 or BIOL 102 with a minimum grade of “B-”; and BIOL 122 with a minimum grade of “C-” or equivalent; or consent of instructor
An ontogenetic and phylogenetic survey of chordate gross anatomy, supplemented by laboratory dissections of representative species is presented. Emphasis is placed on ecomorphology and the changes in chordate structure and biology of chordates that comprise their evolution, with an analysis of the significance of these changes in light of our modern knowledge of evolution. Two hours of lecture and one three-hour laboratory period weekly. *In alternate spring semesters, either BIOL 382 or BIOL 284 will be offered.*

**BIOL 396   Research Problems in Biology (1-3 credits)**
Prerequisite: Not open to freshmen. Acceptance by the supervising faculty member
The student will conduct an individual research experience over one semester or multiple semesters in collaboration with a faculty member. At the end of each semester, a written progress report must be submitted for review by the supervising faculty member and a presentation is made to the biology faculty and students. The course may be repeated and up to three credits can be used toward a concentration elective in biology.

**BIOL 408   The Biology of Marine Mammals (3 credits)**
Prerequisite: BIOL 122 with a minimum grade of “C-” or equivalent; or consent of instructor
This is an introductory course in the study of marine mammals. Topics to be covered include the evolution, classification, distribution, life histories, anatomy, morphology, behavior and ecology of marine mammals. We will consider the role of marine mammals in marine ecosystems and the interaction between marine mammals and humans. Three hours of lecture weekly. *May be taken for graduate-level credit.*

**BIOL 420   Limnology (4 credits)**
Prerequisite: BIOL 121 with a minimum grade of “C-” or BIOL 100 or BIOL 102 with a minimum grade of “B-”; and CHEM 132 or CHEM 142, MATH 100 or MATH 141 or MATH 151; or consent of instructor
Limnology examines the interaction of physical and chemical processes in freshwater ecosystems and how they influence populations of freshwater organisms. Laboratory exercises will focus on a field project requiring sampling and analysis of water chemistry, bacteria, phytoplankton, zooplankton and macroinvertebrates. Students must expect to spend extra time outside of class on the collection and analysis of laboratory project data. Two hours of lecture and one four-hour laboratory session per week. *May be taken for graduate-level credit.* Addenda: This course has been changed effective spring 2012. See the Catalog Addenda section of this publication for detailed information.

**BIOL 422   Biological Evolution (3 credits)**
Prerequisite: BIOL 321 with a minimum grade of “C-” or consent of instructor
This course covers the theory of evolution and the operation of evolutionary forces as related to modern taxonomy, with emphasis on such
topics as mutation, variation, hybridization, ployploidy, isolation, natural selection and population genetics. Three hours of lecture weekly. Offered alternate years, spring semester. May be taken for graduate-level credit.

BIOL 423  Invasion Ecology (3 credits)
Prerequisite: BIOL 225 with a minimum grade of “C-” or consent of instructor
This course will examine the spread of invasive organisms. It will focus on the biology of organisms that alter ecosystems; endanger public health, local economies and traditional cultures; and their vectors of dispersal and management. Three hours of lecture weekly. Spring semester.

BIOL 425  Population Ecology (4 credits)
Prerequisite: BIOL 122 with a minimum grade of “C-“ or equivalent; and BIOL 225 with a minimum grade of “C-“; and BIOL 321 with a minimum grade of “C-“; or consent of instructor
The dynamics and evolution of populations are examined. Topics to be covered include models in population biology, population growth, density dependent and density independent growth, population genetics, evolution of life histories, species interactions, competition, predator-prey interactions, host-parasitoid interactions, disease and pathogens, and population growth and regulation. Three hours of lecture and three hours of laboratory weekly. Either semester.

BIOL 428  Microbiology (4 credits)
Prerequisite: BIOL 200 with a minimum grade of “C-“; and BIOL 321 with a minimum grade of “C-“
An introduction to the diversity of microorganisms with emphasis on bacterial growth and metabolism, microbial ecology and host/microbe interactions including infectious disease is presented. Three hours of lecture and one three-hour laboratory period weekly. Spring semester. (CWRM)

BIOL 430  Embryology (4 credits)
Prerequisite: BIOL 200 with a minimum grade of “C-“
This course is a study of developmental processes at different levels of organization with emphasis on animal development. Topics include gametogenesis, fertilization, early embryonic development, organogenesis, differentiation, growth and regeneration. Three hours of lecture and one three-hour laboratory period weekly. Offered alternate years, spring semester. May be taken for graduate-level credit.

BIOL 434  Biological Electron Microscopy (3 credits)
Prerequisite: BIOL 200 with a minimum grade of “C-“ or consent of instructor
An introduction to the techniques of tissue preparation including fixation, dehydration and embedment procedures, followed by sectioning and staining, practical use of the electron microscope and interpretation of electron photomicrographs is provided. Basic principles of tissue preparation and applications of electron microscopy will be stressed. One hour of lecture and one four-hour laboratory period weekly. Spring semester. May be taken for graduate-level credit.

BIOL 436  Mammalian Reproductive Physiology (4 credits)
Prerequisite: BIOL 200 with a minimum grade of “C-“; plus one of the following: BIOL 252, BIOL 373; or consent of instructor
This course is designed to introduce mammalian reproduction from a physiological perspective. The goal is to provide a functional understanding of the physiological bases for reproductive events in vertebrates, emphasizing mammals. Three hours of lecture and three hours of laboratory per week.

BIOL 450  Virology (4 credits)
Prerequisite: BIOL 200 with a minimum grade of “C-“; and CHEM 131 and CHEM 132 or CHEM 141 and CHEM 142; or consent of instructor
This course is an introduction to the study of viruses including bacteriophages and animal viruses. Viral structure and mechanisms of action are considered at the molecular level, and emphasis is placed on viral replication strategies. Three hours of lecture and one three-hour laboratory weekly. May be taken for graduate-level credit.

BIOL 460  Toxicology Principles (4 credits)
Prerequisite: BIOL 200 with a minimum grade of “C-“; and BIOL 251 or BIOL 341 or BIOL 373, any of which may be taken concurrently; and CHEM 343 which may be taken concurrently; or consent of instructor
This course is an introduction to the fundamentals in molecular toxicology, ecotoxicology and analytical toxicology. Classes will build upon students’ previous cellular biology, molecular biology, organic chemistry, biochemistry and ecology classes and experience. Three hours of lecture and one three-hour laboratory weekly.

BIOL 472  Human Genetics (3 credits)
Prerequisite: BIOL 321 with a minimum grade of “C-“ or consent of instructor
The course investigates general principles of genetics as applied to humans. Emphasis will be placed on human genome analysis,
pedigree construction and analysis, diagnosis and treatment of genetic diseases, gene mapping, cytogenetics of normal and aberrant genomes and population genetics. Three hours of lecture weekly. Offered every other year. May be taken for graduate-level credit.

BIOL 475  Parasitology (4 credits)
Prerequisite: BIOL 428 with a minimum grade of “C-” or consent of instructor
The relationships between parasitic microorganisms and their hosts will form the basis for this course. We will study both protozoal and multicellular parasites of animals and humans, mechanisms of disease, host defenses and public health aspects of control and treatment with strong emphasis on the medical/veterinary and global public health aspects of this area of biology. The course will include student independent investigation of the biochemical and immunologic advances of the last three decades through reading of the primary literature, and oral presentation of a topic based on this investigation. Three hours of lecture and one three-hour laboratory per week. Offered every other year. May be taken for graduate-level credit.

BIOL 482  Neurobiology (4 credits)
Prerequisite: BIOL 200 with a minimum grade of “C-”; and BIOL 251 with a minimum grade of “C-” or BIOL 373 with a minimum grade of “C-”; and MATH 141 or 151 or equivalent; or consent of instructor
Nervous system ultrastructure, and the chemical and physiological properties of mammalian nerve cells will be discussed. Topics will include an examination of cell types, membrane potentials and synaptic transmission. Sensory and motor functions of nerves; reflex mechanisms; autonomic nervous functions; and central nervous system functions such as learning, memory and vision will also be covered. Three hours of lecture and one three-hour laboratory weekly. Offered every other year. May be taken for graduate-level credit. Addenda: This course has been changed effective spring 2012. See the Catalog Addenda section of this publication for detailed information.

BIOL 485  Honors Thesis (3 credits)
Prerequisite: Open to Commonwealth and Departmental Honors students
One-hour weekly meetings with the thesis director will culminate in an honors thesis. With the consent of the Departmental Honors Committee and the thesis director, this course may be extended into a second semester for three additional credits depending upon the scope of the project. Whether the final version of the thesis qualifies the student to graduate with honors will be determined by the Departmental Honors Committee. Offered either semester.

BIOL 490  Special Topics in Ecology (1-3 credits)
Prerequisite: BIOL 225 with a minimum grade of “C-”; other prerequisites may be required
Various specialized or experimental offerings in ecology will be offered from time to time as either three-credit courses or short courses of one or two credits. Each course may be lecture, laboratory or combined lecture and laboratory as appropriate. Biology majors may combine three short courses to equal one elective. May be taken for graduate-level credit.

BIOL 491  Topics in Environmental Biology (1-3 credits)
Prerequisite: BIOL 225 with a minimum grade of “C-”; other prerequisites dependent on topic; or consent of instructor
Various specialized or experimental offerings in environmental biology will be offered from time to time as either three-credit courses or short courses of one or two credits. Each course may be lecture, laboratory or combined lecture and laboratory as appropriate. Biology majors may combine three short courses to equal one elective. This course may be repeated for different topics.

BIOL 492  Topics in Field Biology (1-3 credits)
Prerequisite: BIOL 225 with a minimum grade of “C-”; other prerequisites dependent on topic; or consent of instructor
Various specialized or experimental offerings in environmental biology will be offered from time to time as either three-credit courses or short courses of one or two credits. Each course may be lecture, laboratory or combined lecture and laboratory as appropriate. Biology majors may combine three short courses to equal one elective. This course may be repeated for different topics.

BIOL 493  Topics in Molecular Biology (1-3 credits)
Prerequisite: BIOL 200 with a minimum grade of “C-”; other prerequisites dependent on topic; or consent of instructor
Various specialized or experimental offerings in molecular biology will be offered from time to time as either three-credit courses or short courses of one or two credits. Each course may be lecture, laboratory or combined lecture and laboratory as appropriate. Biology majors may combine three short courses to equal one elective. This course may be repeated three times for different topics. Offered either semester.

BIOL 494  Topics in Cellular Biology (1-3 credits)
Prerequisite: BIOL 200 with a minimum grade of “C-”; other prerequisites dependent on topic; or consent of instructor
Various specialized or experimental offerings in cellular biology will be offered from time to time as either three-credit courses or short courses of one or two credits. Each course may be lecture, laboratory or combined lecture and laboratory as appropriate. Biology majors may combine three short courses to equal one elective. This course may be repeated three times for different topics. Offered either semester.
BIOL 495  Topics in Physiology (1-3 credits)
Prerequisite: BIOL 200 with a minimum grade of "C-"; other prerequisites dependent on topic; or consent of instructor
Various specialized or experimental offerings in physiology will be offered from time to time as either three-credit courses or short courses of one or two credits. Each course may be lecture, laboratory or combined lecture and laboratory as appropriate. Biology majors may combine three short courses to equal one elective. This course may be repeated three times for different topics. Offered either semester.

BIOL 497  Undergraduate Biological Research (3 credits)
Prerequisite: Sophomore, junior or senior standing and acceptance by the supervising faculty member
Students who are accepted by a faculty member as a participant in an undergraduate laboratory or field research project enroll in this course. Projects entail substantial research in the faculty member's biological subdiscipline and are publicized as student research positions become available. Students are extensively involved in experimental planning, execution, analysis and reporting, and present their results to the biology department. Offered every semester.

BIOL 498  Internship in Biology (3-15 credits)
Prerequisite: Consent of the department
Internships include research laboratory or occupational experience in industrial, allied health, educational, medical, governmental, recreational, regulatory or other organizations outside of the university. No more than six credits may be used toward the biology major electives. This course may be repeated for a maximum of 15 credits. Graded on a (P) Pass/(N) No Pass basis. Either semester.

BIOL 499  Directed Study in Biology (1-3 credits)
Prerequisite: Consent of the department; formal application required
Directed study is open to juniors and seniors who have demonstrated critical and analytical abilities in their studies and who wish to pursue a project independently. This course may be taken twice for a maximum of six credits. Graded on a (P) Pass/(N) No Pass basis. Offered either semester.

BIOL 502  Research (3 or 6 credits)
Prerequisite: Consent of the department; formal application required
Original research is undertaken by the graduate student in their field. For details, consult the paragraph titled “Directed or Independent Study” in the “College of Graduate Studies” section of this catalog. This course may be repeated for a maximum of six credits.

BIOL 503  Directed Study (1-3 credits)
Prerequisite: Consent of the department; formal application required
Directed study is designed for the graduate student who desires to study selected topics in a specific field. For details, consult the paragraph titled “Directed or Independent Study” in the “College of Graduate Studies” section of this catalog. This course may be repeated for a maximum of six credits.

BIOL 581  Mammalogy (4 credits)
Prerequisite: Matriculation in the MAT in Biology or consent of instructor
This course covers the classification, distribution, life histories, techniques of collection and preservation, evolution, ecology, behavior, economic importance and techniques of field study of mammals. Three hours lecture and one three-hour laboratory period per week. Offered spring semester.

Biological Sciences: Other Approved Courses

BIOE 512  Advances in Biological Science (3 or 4 credits)
Designed for secondary education science teachers, this course will consist of a seminar covering a selected area of biology related to the curriculum frameworks and teaching in the schools. The seminar could cover one topic or several related topics in three-five week blocks per topic and could be team-taught. Some topics may be team-taught by a biology faculty member and a K-12 master teacher with appropriate background and qualifications, such as a PALMS science specialist. This course may be repeated for different topics.

BIOF 508  Special Topics in Middle School Life Science (1-3 credits)
This course is designed to accommodate one-credit modules, three-credit courses and workshops and institutes with variable credit in selected areas of middle school (grades 6-8) level life science as determined by the requirements of the Massachusetts Curriculum Framework in Science and Technology/Engineering. Possible topics include classification of organisms, structure and function of cells, systems in living things, reproduction and heredity, evolution and biodiversity, living things and their environment, energy and living things and changes to ecosystems over time. Specific content will be developed to meet the assessed needs of teachers and the school districts. This course is designed to accommodate topics of teacher professional development under grant supported projects and school district

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supported projects as well as occasional credit offerings for middle school-level in-service and pre-service teachers. This course is repeatable for different topics.

**BIOL 135   Freshman Honors Colloquium (1 credit)**
Prerequisite: Open to Commonwealth Honors students and to others at the discretion of the instructor
Freshman Honors Colloquia in biology allow exceptionally able students to explore challenging topics in small classes under close faculty supervision. Colloquia meet once a week for 50 minutes and culminate in a paper or scientific project, which provides the major part of the grade. The minimum enrollment is two and the maximum is 12. Topics vary from semester to semester. Offered fall semester.

**BIOL 136   Freshman Honors Colloquium (1 credit)**
Prerequisite: Open to Commonwealth Honors students and to others at the discretion of the instructor
Freshman Honors Colloquia in biology allow exceptionally able students to explore challenging topics in small classes under close faculty supervision. Colloquia meet once a week for 50 minutes and culminate in a paper or scientific project, which provides the major part of the grade. The minimum enrollment is two and the maximum is 12. Topics vary from semester to semester. Offered spring semester.

**BIOL 286   Sophomore Honors Colloquium (1 credit)**
Prerequisite: Open to Commonwealth Honors students and to others at the discretion of the instructor
Sophomore Honors Colloquia in biology allow exceptionally able students to explore challenging topics in small classes under close faculty supervision. Colloquia meet once a week for 50 minutes and culminate in a paper or scientific project, which provides the major part of the grade. The minimum enrollment is two and the maximum is 12. Topics vary from semester to semester. Offered fall semester.

**BIOL 287   Sophomore Honors Colloquium (1 credit)**
Prerequisite: Open to Commonwealth Honors students and to others at the discretion of the instructor
Sophomore Honors Colloquia in biology allow exceptionally able students to explore challenging topics in small classes under close faculty supervision. Colloquia meet once a week for 50 minutes and culminate in a paper or scientific project, which provides the major part of the grade. The minimum enrollment is two and the maximum is 12. Topics vary from semester to semester. Offered spring semester.

**BIOL 480   Tropical Field Ecology (3 credits)**
Prerequisite: BIOL 321 or consent of instructor
This is an intensive two-week course on tropical ecology held in field locations in the neotropics. Ecosystems to be studied include tropical rain forests, mangrove islands, sandy islands and coral reefs. This course is only offered in the summer.

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**CAPE VERDEAN CREOLE**

**LACV 101   Elementary Cape Verdean Creole (3 credits)**
This course is an introduction to the lexical, grammatical, semantic and phonetic structures of the Cape Verdean Creole language, with a special emphasis on functional communication. The students are offered an initial introduction of the origins of the language, and everyday cultural concepts are discussed. Note: See the “Departmental Foreign Language Policy” in the “Foreign Languages” section of this catalog. (CGCL; CHUM)

**LACV 199   First Year Seminar (3 credits)**
Prerequisite: Open to all freshmen with a writing placement score of 3 or above or an SAT score of 500 or above or who have completed ENGL 101. Students with 24 or more transfer credits will have this requirement waived.
First Year Seminars (FYS) are writing-intensive, topic courses that introduce students to academic thought, discourse and practices. FYS courses prepare and orient students toward productive and fulfilling college careers by actively engaging them in a specific academic area of interest. Students will improve their writing, reading, research and basic information and technology skills while learning to work both collaboratively and independently. These courses will fulfill the First Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one FYS course may be taken for credit. (CFYS)

**LACV 298   Second Year Seminar (Speaking Intensive) (3 credits)**
Prerequisite: _ _ _ _ 199, Open to all sophomores and juniors who have completed ENGL 101 and the speaking skills requirement. Students with 54 or more transfer credits will have this requirement waived. Cannot be taken if _ _ _ _ 299 is taken for credit.
Second Year Seminars (SYS) are speaking-intensive, topic courses that build on the academic skills and habits introduced in the First Year Seminar. SYS courses engage students in a specific academic area of interest and provide them with the opportunity to reinforce, share and interpret knowledge. Students will improve their speaking, reading, research and basic information and technology skills while
building the connections between scholarship and action that are required for lifelong learning. These courses will fulfill the Second Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one SYS course may be taken for credit. (CSYS)

LACV 299  Second Year Seminar (Writing Intensive) (3 credits)
Prerequisite: _ _ _ _ 199; Open to all sophomores and juniors who have completed ENGL 101 and ENGL 102. Students with 54 or more transfer credits will have this requirement waived. Cannot be taken if _ _ _ _ 298 is taken for credit.
Second Year Seminars (SYS) are writing-intensive, topic courses that build on the academic skills and habits introduced in the First Year Seminar. SYS courses engage students in a specific academic area of interest and provide them with the opportunity to reinforce, share and interpret knowledge. Students will improve their writing, reading, research and basic information and technology skills while building the connections between scholarship and action that are required for lifelong learning. These courses will fulfill the Second Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one SYS course may be taken for credit. (CSYS)

**CHEMICAL SCIENCES**

CHEM 100  Computers in Chemistry (2 credits)
Prerequisite: CHEM 141 with a minimum grade of "C-"
This course provides students with an introduction to the use of computer applications for doing and communicating chemistry. (It is equally useful for other science majors.) Topics covered include the use of both general purpose (word processors and presentation graphics) and specialized (including two- and three-dimensional molecular graphics programs) applications for communicating technical information. Other topics covered include an introduction to molecular modeling and the technical applications of spreadsheets and databases.

CHEM 102  Chemistry in Everyday Life (3 credits)
A selection of topics from the multitude of chemical and nuclear reactions encountered in the everyday life of the modern person will be presented through lectures and demonstrations. Topics such as the following may be included: evaluation of energy alternatives, radioactive isotopes in diagnosis and treatment of disease, risk-to-benefit evaluation of food additives and environmental impact of chemical waste disposal. This course is not recommended for science majors. Either semester. (CNSN)

CHEM 131  Survey of Chemistry I (4 credits)
This sequence of courses surveys the broad range of topics that comprise the field of chemistry. Topics covered first semester include atomic structure, chemical bonding, states of matter, solutions, chemical reactions (with an emphasis on acid/base reactions) and nuclear chemistry. Topics covered in the second semester include the structure, nomenclature and reactions of organic molecules, enzymes, and the basics of metabolism (concentrating on energy producing pathways). This sequence is designed for students requiring a yearlong course in chemistry, but who are not planning further study in chemistry (except for instrumentation, CHEM 250). Three hours of lecture and one three-hour laboratory weekly. Offered both semesters. (CNSL)

CHEM 132  Survey of Chemistry II (3 credits)
Prerequisite: CHEM 131 with a minimum grade of "C-"
This sequence of courses surveys the broad range of topics that comprise the field of chemistry. Topics covered first semester include atomic structure, chemical bonding, states of matter, solutions, chemical reactions (with an emphasis on acid/base reactions) and nuclear chemistry. Topics covered in the second semester include the structure, nomenclature and reactions of organic molecules, enzymes, and the basics of metabolism (concentrating on energy producing pathways). This sequence is designed for students requiring a yearlong course in chemistry, but who are not planning further study in chemistry (except for instrumentation, CHEM 250). Three hours of lecture each week. Offered spring semester only. (CNSN)

CHEM 135  Freshman Honors Colloquium (1 credit)
Prerequisite: Open to Commonwealth honors students and to others at the discretion of the instructor
Freshman Honors Colloquia in chemistry allow exceptionally able students to explore a challenging topic in small classes under close faculty supervision. Colloquia meet once a week for 50 minutes and culminate in a paper or scientific project, which provides the major part of the grade. The minimum enrollment is two and the maximum is 12. Topics vary from semester to semester. Offered fall semester.

CHEM 136  Freshman Honors Colloquium (1 credit)
Prerequisite: Open to Commonwealth honors students and to others at the discretion of the instructor
Freshman Honors Colloquia in chemistry allow exceptionally able students to explore a challenging topic in small classes under close faculty supervision. Colloquia meet once a week for 50 minutes and culminate in a paper or scientific project, which provides the major part of the grade. The minimum enrollment is two and the maximum is 12. Topics vary from semester to semester. Offered spring semester.
CHEM 141  Chemical Principles I (4 credits)
Theoretical inorganic chemistry will be studied with emphasis on mass-energy relationships in terms of structure and physical laws. Laboratory work emphasizes quantitative techniques. Three hours of lecture and four hours of laboratory weekly. Offered fall semester. (CNSL; CQUR)

CHEM 142  Chemical Principles II (4 credits)
Prerequisite: CHEM 141 with a minimum grade of "C-"
Theoretical inorganic chemistry will be studied with emphasis on mass-energy relationships in terms of structure and physical laws. Laboratory work emphasizes quantitative techniques. Three hours of lecture and four hours of laboratory weekly. Offered spring semester.

CHEM 199  First Year Seminar (3 credits)
Prerequisite: Open to all freshmen with a writing placement score of 3 or above or a SAT score of 500 or above or who have completed ENGL 101. Students with 24 or more transfer credits will have this requirement waived.
First Year Seminars (FYS) are writing-intensive topic courses that introduce students to academic thought, discourse and practices. FYS courses prepare and orient students toward productive and fulfilling college careers by actively engaging them in a specific academic area of interest. Students will improve their writing, reading, research and basic information and technology skills while learning to work both collaboratively and independently. These courses will fulfill the First Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one FYS course may be taken for credit. (CFYS)

CHEM 241  Quantitative Chemical Analysis (4 credits)
Prerequisite: CHEM 142 with minimum grade of "C-"
The classical and modern methods for the quantitative analysis of organic and inorganic compounds, including volumetric, gravimetric, spectroscopic and chromatographic methods. Topics covered include acid-based, solubility and complex-formation equilibria, as well as an introduction to spectroscopy and chromatography. Three hours of lecture and one three-hour laboratory weekly. Offered every other spring semester.

CHEM 242  Intermediate Inorganic Chemistry (3 credits)
Prerequisite: CHEM 142 with a minimum grade of "C-"
The descriptive chemistry, as well as synthesis and reactions, of non-transitional elements and their compounds are studied systematically. Correlations of structure and properties are explained on the basis of modern theories. Offered fall semester.

CHEM 286  Sophomore Honors Colloquium (1 credit)
Prerequisite: Open to Commonwealth Honors students and to others at the discretion of the instructor
Sophomore Honors Colloquia in chemistry allow exceptionally able students to explore a challenging topic in small classes under close faculty supervision. Colloquia meet once a week for 50 minutes and culminate in a paper or scientific project, which provides the major part of the grade. The minimum enrollment is two and the maximum is 12. Topics vary from semester to semester. Offered fall semester.

CHEM 287  Sophomore Honors Colloquium (1 credit)
Prerequisite: Open to Commonwealth Honors students and to others at the discretion of the instructor
Sophomore Honors Colloquia in chemistry allow exceptionally able students to explore a challenging topic in small classes under close faculty supervision. Colloquia meet once a week for 50 minutes and culminate in a paper or scientific project, which provides the major part of the grade. The minimum enrollment is two and the maximum is 12. Topics vary from semester to semester. Offered spring semester.

CHEM 290  Environmental Chemistry (3 credits)
Prerequisite: CHEM 132 with a minimum grade of "C-" or CHEM 142 with a minimum grade of "C-"
A one-semester course covering the basic principles of aquatic chemistry, atmospheric chemistry, and the chemistry of the geosphere. Topics include energy and the environment, water pollution, water treatment, air pollution, photochemical smog, global warming, the ozone hole and an introduction to "green" chemistry. Offered once in two years, spring semester.

CHEM 298  Second Year Seminar (Speaking Intensive) (3 credits)
Prerequisite: _ _ _ _ 199; Open to all sophomores and juniors who have completed ENGL 101, and the speaking skills requirement. Students with 54 or more transfer credits will have this requirement waived. Cannot be taken if _ _ _ _ 299 is taken for credit.
Second Year Seminars (SYS) are speaking-intensive topic courses that build on the academic skills and habits introduced in the First Year Seminar. SYS courses engage students in a specific academic area of interest and provide them with the opportunity to reinforce, share and interpret knowledge. Students will improve their speaking, reading, research and basic information and technology skills while building the connections between scholarship and action that are required for lifelong learning. These courses will fulfill the Second Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one SYS course may be taken for credit. (CSYS)
CHEM 299  Second Year Seminar (Writing Intensive) (3 credits)
Prerequisite: ___ 199; Open to all sophomores and juniors who have completed ENGL 101 and ENGL 102. Students with 54 or more transfer credits will have this requirement waived. Cannot be taken if ___ 298 is taken for credit.
Second Year Seminars (SYS) are writing-intensive topic courses that build on the academic skills and habits introduced in the First Year Seminar. SYS courses engage students in a specific academic area of interest and provide them with the opportunity to reinforce, share and interpret knowledge. Students will improve their writing, reading, research and basic information and technology skills while building the connections between scholarship and action that are required for lifelong learning. These courses will fulfill the Second Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one SYS course may be taken for credit. (CSYS)

CHEM 343  Organic Chemistry I (4 credits)
Prerequisite: CHEM 142 with a minimum grade of "C-"
An introductory course in organic chemistry organized in terms of the structure of organic compounds, mechanism of organic and biorganic and environmental chemistry. The laboratory includes an elementary, middle, and high school Chemistry OutReach project for students interested in science teaching careers. Three hours of lecture and four hours of laboratory weekly.

CHEM 344  Organic Chemistry II (4 credits)
Prerequisite: CHEM 343 with a minimum grade of "C-"
The lecture portion of this course may be taken independent of the laboratory under CHEM 341 Organic Chemistry I (Non-Lab) (three credits) and CHEM 342 Organic Chemistry II (Non-Lab) (three credits). CHEM 341 and CHEM 342 are offered summers only.

CHEM 381  Physical Chemistry I (4 credits)
Prerequisite: CHEM 142 with a minimum grade of "C-" and MATH 152 with a minimum grade of "C-". MATH 142 with a minimum grade of "C-" may be substituted for MATH 152 with consent of instructor
The laws governing the physical and chemical properties of substances. This course covers thermodynamics and kinetics. Three hours of lecture and one four-hour laboratory period weekly.

CHEM 382  Physical Chemistry II (4 credits)
Prerequisite: CHEM 142 with a minimum grade of "C-" and MATH 152 with a minimum grade of "C-". MATH 142 with a minimum grade of "C-" may be substituted for MATH 152 with consent of instructor
The laws governing the physical and chemical properties of substances. This course focuses on molecular spectroscopy and quantum chemistry and statistical mechanics. Three hours of lecture and one four-hour laboratory period weekly.

CHEM 390  Research Problems in Chemistry (1-3 credits)
Prerequisite: Consent of instructor
The student will work on a research project under the direction of a faculty member. A written report (see department office for preparation guide) must be submitted to the department chairperson by the end of the final exam period. This course may be repeated for up to six credits. Graded on a (P) Pass/(N) No Pass basis.

CHEM 440  Advanced Organic Chemistry (3 credits)
Prerequisite: CHEM 344 with a minimum grade of "C-"
Selected topics in advanced organic chemistry, such as physical organic chemistry, alicyclic and heterocyclic chemistry, natural products and advanced synthetic methods.

CHEM 444  Advanced Inorganic Chemistry (3 credits)
Prerequisite: CHEM 344 with a minimum grade of "C-" and CHEM 382 with a minimum grade of "C-". CHEM 382 may be taken concurrently.
The topics of group theory, stereochemistry, ligand field theory, molecular orbital theory, synthesis and kinetics of reactions as applied to transition metal elements will be treated in detail. Hours arranged. Offered spring semester. May be taken for graduate-level credit.

CHEM 446  Advanced Inorganic Chemistry Lab (2 credits)
Prerequisite: CHEM 242 with a minimum grade of "C-"; or CHEM 444 with a minimum grade of "C-". CHEM 444 may be taken concurrently
Key concepts in inorganic chemistry are explored through the synthesis and characterizations of variety of inorganic compounds with an emphasis on organometallic and coordination complexes. Modern synthetic methods, including inert atmosphere techniques, will be used to prepare target compounds. The resulting compounds will be characterized and examined using a wide array of analytical and spectroscopic techniques such as IR, Raman, UV-Vis, fluorescence, electrochemistry and NMR. Offered spring semester.

CHEM 450  Instrumental Analysis (4 credits)
Prerequisite: CHEM 344 with a minimum grade of "C-" and CHEM 381 with a minimum grade of "C-". CHEM 381 may be taken concurrently.
Theory and practical application of instrumental methods as applied to chemical analysis, including pH measurements, electroeposition, potentiometry, crystallography, mass spectrometry and spectroscopy. Three hours of lecture and one three-hour laboratory weekly. Offered fall semester. May be taken for graduate-level credit.

**CHEM 461 General Biochemistry I (4 credits)**
Prerequisite: CHEM 344 with a minimum grade of "C-"
A survey of the chemical components of living matter and the major processes of cellular metabolism. Three hours of lecture and one three-hour laboratory period weekly. Offered fall semester. May be taken for graduate-level credit.

**CHEM 462 General Biochemistry II (3 credits)**
Prerequisite: CHEM 461 with a minimum grade of "C-"
A survey of the chemical components of living matter and the major processes of cellular metabolism. Three hours of lecture weekly. Offered spring semester.

**CHEM 466 Advanced Biochemistry Laboratory (2 credits)**
Prerequisite: CHEM 461 with a minimum grade of "C-"
A study of special laboratory techniques used in biochemical research such as chromatography, enzymology, radiochemical techniques, electrophoresis and metabolic pathways. An individual project will complete the laboratory. One hour of laboratory discussion and three hours of laboratory weekly. Offered spring semester. May be taken for graduate-level credit.

**CHEM 485 Honors Thesis (3 credits)**
Prerequisite: Open to Commonwealth and Departmental Honors students
One-hour weekly meetings with the thesis director will culminate in an honors thesis. With the consent of the Departmental Honors Committee and the thesis director, this course may be extended into a second semester for three additional credits depending upon the scope of the project. Whether the final version of the thesis qualifies the student to graduate with honors will be determined by the Departmental Honors Committee. Offered either semester.

**CHEM 489 Advanced Environmental Chemistry (3 credits)**
Prerequisite: CHEM 344 with a minimum grade of "C-" and consent of instructor
This course will deal with processes for minimizing and treating solid and hazardous waste, toxicological chemistry of inorganic and organic substances, and chemical analysis of waste, water, air and solids. In addition, recent advances in the field of environmental chemistry will be discussed.

**CHEM 490 Special Topics in Chemistry (3 credits)**
Prerequisite: Consent of instructor
Special Topics in Chemistry will deal with various topics at the “cutting edge” of chemistry. The course will stress the current literature as the “text.” Assessment will be based primarily on writing assignments. The topic will change each time the course is offered. The specific topic will be announced prior to registration. Offered spring semester.

**CHEM 498 Internship in Chemical Sciences (3-15 credits)**
Prerequisite: Consent of the department; formal application required
Laboratory experience in industrial or government laboratories, regulating agencies or academic laboratories at other institutions. This course may be repeated for a maximum of 15 credits. Graded on a (P) Pass/(N) No Pass basis. Offered either semester.

**CHEM 499 Directed Study in Chemistry (1-3 credits)**
Prerequisite: Consent of the department; formal application required
Directed study is open to juniors and seniors who have demonstrated critical and analytical abilities in their studies and who wish to pursue a project independently. This course may be taken twice for a maximum of six credits. Offered either semester.

**CHEM 560 Special Topics in Chemistry (variable credit)**
The course will cover special topics of current relevance in chemistry education. The topic to be addressed will be announced prior to registration. This course may be taken more than once with the consent of the adviser.

**Chemical Sciences: Other Approved Courses**

**CHEM 250 Instrumentation (3 credits)**
Prerequisite: CHEM 132 or CHEM 142 or consent of instructor
The physical chemistry basic to modern analytical instrumentation will be discussed as the basis for the study of instrumental analysis. Two hours of lecture and one two-hour laboratory period weekly. Offered once in three years, spring semester.
CHEM 502  Research (1-6 credits)
Prerequisite: Consent of the department; formal application required
Original research is undertaken by the graduate student in his or her field. For details, consult the paragraph titled "Directed or Independent Study" in the "College of Graduate Studies" section of this catalog. This course may be repeated for a maximum of nine credits.

CHEM 503  Directed Study (1-6 credits)
Prerequisite: Consent of the department; formal application required
Directed study is designed for the graduate student who desires to study selected topics in a specific field. For details, consult the paragraph titled "Directed or Independent Study" in the "College of Graduate Studies" section of this catalog. This course may be repeated for a maximum of six credits.

CHEM 550  Chemistry and the Environment (3 credits)
This course is a study of the chemicals in the environment responsible for air, water and soil pollution. Emphasis will be on simple techniques that can be used to detect these various types of chemicals. Laboratory work will include field trips to collect samples and analysis of samples.

- CHINESE

LACH 101  Elementary Chinese I (3 credits)
An introduction to elementary syntactic, semantic, phonetic and paralinguistic structures is offered. Pertinent everyday cultural concepts are discussed. Relevant comparison and contrast with the native language is treated. Functional communication in the second language in a controlled environment is the principal objective of the course. Note: See the “Departmental Foreign Language Policy” in the “Foreign Languages section of this catalog. (CGCL; CHUM)

LACH 102  Elementary Chinese II (3 credits)
Prerequisite: LACH 101; or see the “Departmental Foreign Language Policy” in the “Foreign Languages section of this catalog”
The further study of elementary syntactic, semantic, phonetic and paralinguistic structures is offered. Pertinent everyday cultural concepts are discussed. Relevant comparison and contrast with the native language is treated. Functional communication in the second language in a controlled environment is the principal objective of the course. (CGCL; CHUM)

LACH 199  First Year Seminar (3 credits)
Prerequisite: Open to all freshmen with a writing placement score of 3 or above or a SAT score of 500 or above. Students with 24 or more transfer credits will have this requirement waived.
First Year Seminars (FYS) are writing-intensive, topic courses that introduce students to academic thought, discourse and practices. FYS courses prepare and orient students toward productive and fulfilling college careers by actively engaging them in a specific academic area of interest. Students will improve their writing, reading, research and basic information and technology skills while learning to work both collaboratively and independently. These courses will fulfill the First Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one FYS course may be taken for credit. (CFYS)

LACH 298  Second Year Seminar (Speaking Intensive) (3 credits)
Prerequisite: _ _ _ _199; Open to all sophomores and juniors who have completed ENGL 101, and the speaking skills requirement. Students with 54 or more transfer credits will have this requirement waived. Cannot be taken if _ _ _ _299 is taken for credit.
Second Year Seminars (SYS) are speaking-intensive, topic courses that build on the academic skills and habits introduced in the First Year Seminar. SYS courses engage students in a specific academic area of interest and provide them with the opportunity to reinforce, share and interpret knowledge. Students will improve their speaking, reading, research and basic information and technology skills while building the connections between scholarship and action that are required for lifelong learning. These courses will fulfill the Second Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one SYS course may be taken for credit. (CSYS)

LACH 299  Second Year Seminar(Writing Intensive) (3 credits)
Prerequisite: _ _ _ _199; Open to all sophomores and juniors who have completed ENGL 101 and ENGL 102. Students with 54 or more transfer credits will have this requirement waived. Cannot be taken if _ _ _ _298 is taken for credit.
Second Year Seminars (SYS) are writing-intensive, topic courses that build on the academic skills and habits introduced in the First Year Seminar. SYS courses engage students in a specific academic area of interest and provide them with the opportunity to reinforce, share and interpret knowledge. Students will improve their writing, reading, research and basic information and technology skills while building
the connections between scholarship and action that are required for lifelong learning. These courses will fulfill the Second Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one SYS course may be taken for credit. (CSYS)

**COMMUNICATION DISORDERS**

**COMD 135**  Freshman Honors Colloquium (1 credit)
*Prerequisite: Open to Commonwealth Honors students and to others at the discretion of the instructor*
Freshman Honors Colloquia allows honors students to explore challenging topics in discussion-based small classes; specific topics vary by semester and instructor. This course may be repeated for a maximum of three credits. *Offered fall semester.*

**COMD 136**  Freshman Honors Colloquium (1 credit)
*Prerequisite: Open to Commonwealth Honors students and to others at the discretion of the instructor*
Freshman Honors Colloquia allows honors students to explore challenging topics in discussion-based small classes; specific topics vary by semester and instructor. This course may be repeated for a maximum of three credits. *Offered spring semester.*

**COMD 199**  First Year Seminar (3 credits)
*Prerequisite: Open to all freshmen with a writing placement score of 3 or above or a SAT score of 500 or above or who have completed ENGL 101. Students with 24 or more transfer credits will have this requirement waived.*
First Year Seminars (FYS) are writing-intensive topic courses that introduce students to academic thought, discourse and practices. FYS courses prepare and orient students toward productive and fulfilling college careers by actively engaging them in a specific academic area of interest. Students will improve their writing, reading, research and basic information and technology skills while learning to work both collaboratively and independently. These courses will fulfill the First Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one FYS course may be taken for credit. (CFYS)

**COMD 220**  Introduction to Communication Sciences and Disorders (3 credits)
This course is an introduction to speech, language and hearing disorders in children and adults. Disorders of functional, structural and neurological etiologies will be discussed. *Either semester.*

**COMD 231**  Sign Language I (3 credits)
This course includes the history and development of manual communication and deaf culture in the United States. Focus will be placed on contact signing and American Sign Language through vocabulary development and beginning conversational skills. *Either semester.*

**COMD 232**  Sign Language II (3 credits)
*Prerequisite: COMD 231*
This is a more advanced course in sign language with an emphasis on conversational skills through vocabulary and grammar development. Aspects of the deaf culture will be addressed in this course. *Fall and spring semesters.*

**COMD 250**  Language Development in Young Children (3 credits)
This course is an overview of the normal language acquisition and development process of children. Emphasis will be on the years birth through age five, risk factors and strategies to facilitate development. Theories of language development, rule systems of English, stages of language development, individual and cultural differences, as well as prevention of an identification of language problems will be discussed.

**COMD 281**  Speech Anatomy and Physiology (3 credits)
This is an introduction to the study of the anatomy and physiology of systems involved in speech, language and hearing, and their relationships to disorders of communication. *Fall semester.*

**COMD 282**  Speech and Hearing Science (3 credits)
This is an introductory course as it relates to normal aspects of speech, hearing and language. Physiological elements of speech production, speech acoustics, auditory physiology and the psychophysics of sound reception are included in this course. *Spring semester.*

**COMD 286**  Sophomore Honors Colloquium (1 credit)
*Prerequisite: Open to Commonwealth Honors students and to others at the discretion of the instructor*
Sophomore Honors Colloquia allows honors students to explore challenging topics in discussion-based small classes; specific topics vary by semester and instructor. This course may be repeated for a maximum of three credits. *Offered fall semester.*
COMD 287 Sophomore Honors Colloquium (1 credit)
Prerequisite: Open to Commonwealth Honors students and to others at the discretion of the instructor
Sophomore Honors Colloquia allows honors students to explore challenging topics in discussion-based small classes; specific topics vary by semester and instructor. This course may be repeated for a maximum of three credits. Offered spring semester.

COMD 290 Language Acquisition and Development (3 credits)
This course is an overview of the normal language acquisition and development process through the life span. Emphasis will be placed on children from birth through school age. Theories of language development, rule systems of English, stage of language development, individual and cultural differences, prevention of language problems, and techniques for collecting and analyzing a language sample will be addressed. Either semester.

COMD 294 Phonetics (3 credits)
Analysis and transcription of speech sound systems are included in this course. Spring semester.

COMD 298 Second Year Seminar (Speaking Intensive) (3 credits)
Prerequisite: _ _ _ _ 199; Open to all sophomores and juniors who have completed ENGL 101, and the speaking skills requirement. Students with 54 or more transfer credits will have this requirement waived. Cannot be taken if _ _ _ _ 299 is taken for credit.
Second Year Seminars (SYS) are speaking-intensive topic courses that build on the academic skills and habits introduced in the First Year Seminar. SYS courses engage students in a specific academic area of interest and provide them with the opportunity to reinforce, share, and interpret knowledge. Students will improve their speaking, reading, research and basic information and technology skills while building the connections between scholarship and action that are required for lifelong learning. These courses will fulfill the Second Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one SYS course may be taken for credit. (CSYS)

COMD 299 Second Year Seminar (Writing Intensive) (3 credits)
Prerequisite: _ _ _ _ 199; Open to all sophomores and juniors who have completed ENGL 101 and ENGL 102. Students with 54 or more transfer credits will have this requirement waived. Cannot be taken if _ _ _ _ 298 is taken for credit.
Second Year Seminars (SYS) are writing-intensive topic courses that build on the academic skills and habits introduced in the First Year Seminar. SYS courses engage students in a specific academic area of interest and provide them with the opportunity to reinforce, share, and interpret knowledge. Students will improve their writing, reading, research and basic information and technology skills while building the connections between scholarship and action that are required for lifelong learning. These courses will fulfill the Second Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one SYS course may be taken for credit. (CSYS)

COMD 311 Prevention of Speech, Language and Communication Disorders (3 credits)
Prerequisite: COMD 290 or consent of instructor
The overall objective of speech-language pathology is to optimize the individual's ability to communicate in natural environments and thus improve their quality of life. The purpose of this course is to incorporate students' knowledge from prerequisite courses, introduce additional content, develop clinical skills, and implement the content and skills in a practical situation. Students will meet for instruction and then go to area Head Start programs and implement prevention activities with children.

COMD 312 Language Disorders in Children (3 credits)
Prerequisite: COMD 220 and COMD 290
Etiology, diagnosis, evaluation, cultural differences and treatment of language-impaired children will be covered in this course. Clinical case material will be discussed and analyzed. Diagnostic tools and evaluations methodology will be introduced. Basic theoretical constructs pertaining to the treatment of the language-impaired populations from birth through high school will also be included. Spring semester.

COMD 313 Phonology and Articulation Disorders (3 credits)
Prerequisite: COMD 220 and COMD 281 or COMD 282; and COMD 294
This course is a study of normal and abnormal phonology and articulation, including etiology, prevention, diagnosis, assessment, cultural differences and treatment of phonology and articulation disorders. Use of distinctive feature theory, phonological process analysis and traditional phonetic approaches will be covered. Fall semester.

COMD 325 Voice Disorders in Children and Adults (3 credits)
Prerequisite: COMD 220 and COMD 281 and COMD 282
This course is an introduction to etiology, diagnosis and remediation of voice disorders and associated pathological conditions. Spring semester.

COMD 350 Language Disorders in Young Children (3 credits)
COMD 351  Introduction to Audiology (3 credits)
Prerequisite: COMD 281 and COMD 282
This course is an introduction to the science of hearing including transmission and measurement of sound to the human ear; anatomy, physiology and neurology of hearing mechanisms; related pathological conditions; screening and measurement of hearing; and audiogram interpretation. Fall semester.

COMD 352  Clinical Audiology (3 credits)
Prerequisite: COMD 351
This course introduces the student to the study of the measurement of hearing, including basic tests as well as tests used for differential diagnosis of auditory disorders.

COMD 355 - Study Tour: Multicultural Perspectives in Special Education and Communication Disorders (3 credits)
Prerequisite: COMD 290 and SPED 203; or consent of department chairperson
This course is a faculty-led study tour to investigate how individuals with special needs and/or communication disorders are treated educationally and socially in cultures outside of the United States. This course may be repeated for a maximum of six credits.

COMD 381  Neurological Bases of Speech and Language (3 credits)
Prerequisite: COMD 220 and COMD 281 and COMD 282 and COMD 290
This course will present an overview of the neurological, anatomical and physiological bases of speech and language in order to more fully understand the disorders' processes. The neurological effects of stroke, traumatic brain injury, and degenerative neurological disease and the concomitant effects on speech and language will be discussed.

COMD 391  Understanding Language and Linguistics within the Clinical Process (3 credits)
Prerequisite: COMD 220 and COMD 281 and COMD 282 and COMD 290
This course is designed to provide communication disorders students who already have an understanding of the normal language acquisition process with an overview of the field of linguistics. The universal properties and systematic aspects of languages will be explored. The students will develop their meta-linguistic awareness through discussion of language variation, attitudes about language, language contact and diversity, language change, and visual languages. Application of this information to the speech-language pathologist's role in the language acquisition process and in clinical treatment of language disorders and language differences will be addressed. Offered summer session.

COMD 393  Aural Rehabilitation (3 credits)
Prerequisite: COMD 351
Habilitation and rehabilitation for the hard of hearing including assessment and therapy procedures related to auditory training, speech reading, language therapy and hearing aid training will be covered in this course. Educational management and counseling strategies will also be addressed. Fall semester.

COMD 399  Topical Studies (3 credits)
Variable contemporary topics in communication disorders will be covered in this course. This course may be repeated for different topics. Spring semester.

COMD 440  Clinical Practicum: Audiology (1-3 credits)
Prerequisite: COMD 352, a minimum cumulative GPA of 2.75, a minimum GPA of 2.75 in communication disorders courses, and consent of the communication disorders faculty
This course provides clinical experience in audiology. Clinical hours obtained can be credited toward A.S.H.A. hours. Activities will include hearing screening and diagnostic testing in various settings. The course may be repeated once. Either semester. May be taken for graduate-level credit.

COMD 451  Clinical Strategies in Communication (3 credits)
Prerequisite: COMD 312 and COMD 313 and a minimum cumulative GPA of 2.75 and a minimum GPA of 2.75 in the major and consent of the instructor
The objective of this course is to introduce the student to intervention strategies and skills used in assessment of children and adults with communication disorders. It will be taken in the fall semester of the senior year by all students who elect the practicum track. Fall semester. May be taken for graduate-level credit.

COMD 452  Speech-Language Therapy Techniques (3 credits)
Prerequisites: COMD 312 and COMD 313 and COMD 351 and COMD 480
This course is designed to familiarize students with the process of intervention. Basic principles of therapy will be discussed and specific
techniques used in the treatment of a variety of communication disorders will be introduced. Areas addressed include speech therapy
programming, the effects of culture on clinical interactions, behavior modification, session design, data collection, documentation,
accountability and use of the supervisory process. This course is recommended for students who have not elected the practicum track.

COMD 480 Clinical Procedures: An Overview (3 credits)
In this course, professional behavior, responsibilities and ethics will be presented followed by an introduction to the clinical process. The
need for consideration of cultural diversity and treatment throughout the lifespan will be emphasized. Through completion of 25 observation
hours, the students will have the opportunity to demonstrate integration of concepts presented throughout the communication disorders
curriculum. Either semester. May be taken for graduate-level credit.

COMD 485 Honors Thesis (3 credits)
Prerequisite: Open to Commonwealth Honors students and to others at the discretion of the instructor
In this course, one-hour weekly meetings with the thesis director will culminate in an honors thesis. With the consent of the Departmental
Honors Committee and the thesis director, this course may be extended into a second semester for three additional credits depending
upon the scope of the project. Whether the final version of the thesis qualifies the student to graduate with honors will be determined by the
Departmental Honors Committee. This course may be repeated for a maximum of six credits.

COMD 490 Clinical Practicum: Speech Pathology (3 or 6 credits)
Prerequisite: COMD 312 and COMD 313 and a minimum cumulative GPA of 2.75, a minimum GPA of 2.75 in communication disorders
courses, and consent of the instructor
This course is a clinical experience in speech pathology. Clinical hours can be credited towards A.S.H.A. hours. Activities will be
determined by student need, experience and academic preparation. Initially the student will register for three credits to be taken
concurrently with COMD 451. May be repeated once for a total of six or nine credits.

COMD 498 Internship in Communication Disorders (3 credits)
Prerequisite: COMD 290; consent of communication disorders faculty; formal application required
This course provides off-campus experiences in areas related to expanding the student’s background in communication disorders.
Experiences include but not limited to: audiology clinics and educational programs for children with autism, children who are deaf or hard-
of-hearing, or children or older individuals with other special needs with a focus on speech, language, communication and prevention. This
course may be repeated for a maximum of six credits.

COMD 499 Directed Study in Communication Disorder (1-3 credits)
Prerequisite: Consent of the department; formal application required
Directed study is open to juniors and seniors who have demonstrated critical and analytical abilities in their studies and who wish to pursue
a project independently. This course may be taken twice for a maximum of six credits. Offered either semester.

COMD 559 Study Tour: Multicultural Perspectives in Special Education and Communication (3 credits) Cross Listed with SPED 559
Prerequisite: Dependent on itinerary
This is a faculty led study tour to investigate how individuals with special needs and/or communication disorders are treated educationally
and socially in cultures outside the United States. This course may be repeated for different itineraries.

Communication Disorders: Other Approved Courses

COMD 338 Honors Tutorial (3 credits)
Prerequisite: Open to Commonwealth and Departmental Honors students and consent of the department
Special topics in communication disorders will be covered in this course. Three hourly meetings weekly. Offered fall semester.

COMD 339 Honors Tutorial (3 credits)
Prerequisite: Open to Commonwealth and Departmental Honors students and consent of the department
Special topics in communication disorders will be covered in this course. Three hourly meetings weekly. Offered spring semester.

COMD 502 Research (1-6 credits)
Prerequisite: Consent of the department; formal application required
Original research is undertaken by the graduate student in his or her field. For details, consult the paragraph titled "Directed or
Independent Study" in the "College of Graduate Studies" section of this catalog. This course may be repeated for a maximum of nine
credits.
COMM 503 Directed Study (1-6 credits)
Prerequisite: Consent of the department; formal application required
Directed study is designed for the graduate student who desires to study selected topics in a specific field. For details, consult the paragraph titled "Directed or Independent Study" in the "College of Graduate Studies" section of this catalog. This course may be repeated for a maximum of six credits.

COMMUNICATION STUDIES

COMM 110 Forensics Practicum (1 credit)
Credit is given for 60 or more hours of intercollegiate debate and competitive speaking at intercollegiate tournaments. A maximum of three credit hours can be used toward a major or minor in Communication Studies. This course may be repeated. Graded on a (P) Pass/(N) No Pass basis. Either semester.

COMM 130 Human Communication Skills (3 credits)
This course is designed to foster competence and improve performance in all areas of communication. Through participative learning, the student will demonstrate those skills necessary to communicate effectively in interpersonal, group and public communication situations. Either semester. (CSPK)

COMM 135 Freshman Honors Colloquium (1 credit)
Prerequisite: Open to Commonwealth Honors students and to others at the discretion of the instructor
Freshman Honors Colloquia in communication studies allow exceptionally able students to explore a challenging topic in small classes under close faculty supervision. Colloquia meet once a week for 50 minutes and culminate in a paper or scientific project, which provides the major part of the grade. The minimum enrollment is two and the maximum is 12. Topics vary from semester to semester. Fall semester.

COMM 136 Freshman Honors Colloquium (1 credit)
Prerequisite: Open to Commonwealth Honors students and to others at the discretion of the instructor
Freshman Honors Colloquia in communication studies allow exceptionally able students to explore a challenging topic in small classes under close faculty supervision. Colloquia meet once a week for 50 minutes and culminate in a paper or scientific project, which provides the major part of the grade. The minimum enrollment is two and the maximum is 12. Topics vary from semester to semester. Spring semester.

COMM 150 Practicum in Communication Media (1 credit)
This course provides students with a faculty-supervised, applied-learning experience in connection with electronic media on campus. A minimum of 60 clock hours of work is required. This course may be taken no more than two times for credit within the major. This course may be repeated. Graded on a (P) Pass/(N) No Pass basis. Either semester.

COMM 199 First Year Seminar (3 credits)
Prerequisite: Open to all freshmen with a writing placement score of 3 or above or a SAT score of 500 or above or who have completed ENGL 101. Students with 24 or more transfer credits will have this requirement waived.
First Year Seminars (FYS) are writing-intensive, topic courses that introduce students to academic thought, discourse and practices. FYS courses prepare and orient students toward productive and fulfilling college careers by actively engaging them in a specific academic area of interest. Students will improve their writing, reading, research and basic information and technology skills while learning to work both collaboratively and independently. These courses will fulfill the First Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one FYS course may be taken for credit. (CFYS)

COMM 210 Voice and Diction (3 credits)
Analysis of each student's habits of respiration, phonation, and articulation, along with exercises designed to correct poor habits are included in this course. Physics and physiology of the vocal mechanism will be examined. Students will be trained in perception, differentiation and production of the standard sounds of good American speech. Either semester.

COMM 214 Radio Production (3 credits)
Audio theory, programming and production, station management, and relation of radio to record industry, as well as working as a member of a production team in writing, producing and editing on-air production are included in this course.

COMM 215  Television Studio Production (Television Production I) (3 credits)
Students will learn the equipment, direct live or live on tape, edit, cue audio and video in this course. Team production of news and talk shows are also included.

COMM 221  Foundations of Communication (3 credits)
**Prerequisite:** COMM 130
This course provides students with a well-rounded foundation of communication as an academic discipline. It also surveys communication study from Aristotle's time to the 21st century, including an examination of the emergence of mass media and its impact on human communication.

COMM 222  Communication Studies Theory (3 credits)
**Prerequisite:** COMM 130
This course introduces students to the study and analysis of various theoretical perspectives in communication: interpersonal, group and public, mass and intercultural communication. We ask questions about the nature and effects of human communication in terms of theory building in major approaches to communication studies. Our goal is to clarify and understand both the history of the academic discipline of communication as well as recognize the significant contributions in the development of communication within a variety of its fields of study.

COMM 224  Communication Studies Research (3 credits)
**Prerequisite:** COMM 130
This course provides an introduction to communication research areas, methods and writing style. This course will also examine research methods commonly used in the field of communication studies, both quantitative and qualitative, and how research articles are prepared. The end result will be the successful completion of a proposal for a research project in communication. Addenda: This course has been changed effective spring 2012. See the Catalog Addenda section of this publication for detailed information.

COMM 225  Film as Communication (3 credits)
This course is a survey of the development of the motion picture as a medium of communication, with an emphasis on films and practices of the popular American cinema. The course introduces students to ways in which to understand and analyze film as a form of communication. The course instructs students to analyze mise en scène elements (e.g., script construction, staging, lighting, sound and music, framing, editing techniques, special effects and the impact of digital technologies) and how these impact narrative framing, and viewer understandings and responses. **Every semester.**

COMM 226  Introduction to Public Relations (3 credits)
**Prerequisite:** COMM 130
This course provides the student with a knowledge of the history, goals, objectives and skills associated with public relations. It offers students an opportunity to utilize acquired communication skills in a specific career area as well as giving students the opportunity to acquire writing, reasoning, listening, speaking and other skills required in public relations work. Case study analysis and hands-on applications are primary teaching/learning methodologies. **Either semester. (Formerly COMM 301)**

COMM 227  Multimedia Applications for Public Relations (3 credits)
**Prerequisite:** COMM 226
This course is designed to introduce students to publishing software important in public relations work. Focus includes page layout, text and image, and final printed output. Students write copy for and produce brochures, newsletters and specialty publications.

COMM 229  Foundations of Media Studies (3 credits)
**Prerequisite:** COMM 130
The primary objective of this course is to foster a broad understanding of the field, hone critical skills and increase understanding of the theoretical and philosophical discussions taking place in media studies. The course considers questions such as the interrelationships between production and consumption, the notion of what constitutes a "text," and the ways in which social power shapes how we understand and experience media.

COMM 240  Introduction to Journalism (3 credits)
Introduction to Journalism is designed to acquaint students with news decision-making newsroom operations, reporting, writing, editing and Associated Press style guidelines. The course is laboratory-based and has substantial reporting, writing and editing assignments.

COMM 250  Public Speaking (3 credits)
Study, evaluation and analysis of speech preparation with frequent practice of various speech types are included in this course. Informative, persuasive and special occasion topics will be emphasized. **Either semester. (CSPK)**
COMM 260 Group Communication and Decision Making (3 credits)
This course extends theoretical knowledge of small-group behavior. Stress will be placed on implementation of theories in such areas as leadership, roles of group members, conflict management, reasoning, argument and problem solving. Either semester.

COMM 270 Interpersonal Communication (3 credits)
Students study communication between people who have ongoing and meaningful relationships. The course examines the skills, concepts, theories and values associated with the development and maintenance of such relationships. An emphasis is placed on the influence of such variables as gender and culture. Either semester.

COMM 286 Sophomore Honors Colloquium (1 credit)
Prerequisite: Open to Commonwealth Honors students and to others at the discretion of the instructor
Sophomore Honors Colloquia in communication studies allow exceptionally able students to explore a challenging topic in small classes under close faculty supervision. Colloquia meet once a week for 50 minutes and culminate in a paper or scientific project, which provides the major part of the grade. The minimum enrollment is two and the maximum is 12. Topics vary from semester to semester. Fall semester.

COMM 287 Sophomore Honors Colloquium (1 credit)
Prerequisite: Open to Commonwealth Honors students and to others at the discretion of the instructor
Sophomore Honors Colloquia in communication studies allow exceptionally able students to explore a challenging topic in small classes under close faculty supervision. Colloquia meet once a week for 50 minutes and culminate in a paper or scientific project, which provides the major part of the grade. The minimum enrollment is two and the maximum is 12. Topics vary from semester to semester. Spring semester.

COMM 288 Communication Colloquium (1 credit)
Prerequisite: COMM 130
This course offers an introduction to a communication studies topic. Topics vary from semester to semester. This course is repeatable for different topics up to three credits.

COMM 290 Beginning Videography (3 credits)
Prerequisite: COMM 215
This course is a study of the styles and techniques of video production. Students work with the different elements of video production such as camera, sound, editing and script. Offered once a year.

COMM 291 Video Editing (3 credits)
Prerequisite: COMM 215
This course teaches video editing, focusing on postproduction skills and techniques, specifically how to shoot video with attention to the process, rhythm and continuity, target audience and how to input meaning through production codes. Students will learn to edit on analogue and digital systems, to cut existing video, and to organize video they have shot according to a variety of editing styles.

COMM 298 Second Year Seminar (Speaking Intensive) (3 credits)
Prerequisite: _ _ _ _ 199; Open to all sophomores and juniors who have completed ENGL 101, and the speaking skills requirement. Students with 54 or more transfer credits will have this requirement waived. Cannot be taken if _ _ _ _ 299 is taken for credit.
Second Year Seminars (SYS) are speaking-intensive, topic courses that build on the academic skills and habits introduced in the First Year Seminar. SYS courses engage students in a specific academic area of interest and provide them with the opportunity to reinforce, share and interpret knowledge. Students will improve their speaking, reading, research and basic information and technology skills while building the connections between scholarship and action that are required for lifelong learning. These courses will fulfill the Second Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one SYS course may be taken for credit. (CSYS)

COMM 299 Second Year Seminar (Writing Intensive) (3 credits)
Prerequisite: _ _ _ _ 199; Open to all sophomores and juniors who have completed ENGL 101 and ENGL 102. Students with 54 or more transfer credits will have this requirement waived. Cannot be taken if _ _ _ _ 298 is taken for credit.
Second Year Seminars (SYS) are writing-intensive, topic courses that build on the academic skills and habits introduced in the First Year Seminar. SYS courses engage students in a specific academic area of interest and provide them with the opportunity to reinforce, share and interpret knowledge. Students will improve their writing, reading, research and basic information and technology skills while building the connections between scholarship and action that are required for lifelong learning. These courses will fulfill the Second Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one SYS course may be taken for credit. (CSYS)

COMM 300 Media and Multiculturalism (3 credits)
Prerequisite: COMM 130
This course explores the network of relationships between media processes (e.g., production, consumption, representation) and a range of multicultural identities (e.g., race, class, gender), paying particular attention to the role of power and privilege in shaping human conditions. Offered once a year.

COMM 303 Introduction to Organizational Communication (3 credits)
Prerequisite: COMM 130 and COMM 222
This course includes the analysis of communication problems in modern complex organizations, theory and practice. Spring semester.

COMM 305 Advanced Forensics Laboratory (3 credits)
Prerequisite: COMM 110 or consent of instructor
After advanced individual work in speech composition and delivery, the student will be required to prepare a variety of speech types for intercollegiate competition in this course. Fall semester.

COMM 310 Film History (3 credits)
Prerequisite: COMM 130
This survey course explores the history of cinema through a range of lenses (e.g., aesthetic, technological, economic and social film history). Regular screenings supplement lecture, group discussion and regular written assignments. Offered once yearly.

COMM 311 Media Literacy (3 credits)
Prerequisite: COMM 229
This course offers both a cultural contextualization of mass-, computer-, and electronically-mediated communication and the tools by which students can access, analyze, evaluate, use and create media forms and content. An emphasis is placed on fostering the critical analysis and interpretation skills that contribute to the development of well-informed, independent-thinking citizens.

COMM 312 Writing for Public Relations (3 credits)
Prerequisite: COMM 226
This course will offer the student writing experience in various forms of public relations including writing assignments that would be typical in both nonprofit and business organizations. Included in this course are press releases, brochures, newsletters, feature stories and speeches. The computer is the essential technology for this course. Either semester.

COMM 313 Media Law and Ethics (3 credits)
Prerequisite: COMM 229
This course will introduce students to the study of legal and ethical issues in the media industry and organizations. Students will be exposed to the applications of these issues and the ability to analyze the important legal and ethical aspects involved with the mass media network and the industry. Philosophical theories that deal with morals and ethics will be explored.

COMM 325 Broadcast News Writing (3 credits)
This course offers instruction in the writing of news and public affairs copy for radio and television. News gathering and writing assignments will be given weekly.

COMM 330 Business and Professional Communication (3 credits)
This course increases the students' levels of competence in negotiating, interviewing, evaluating, leading and presentational skills. This course stresses abilities needed to attain cooperation and exert influence in corporate and public sector work environments. Either semester.

COMM 335 News and Politics (3 credits)
Prerequisite: COMM 240
In this course, students will develop an understanding of political, social and cultural events as they affect print and electronic journalism. Offered once a year.

COMM 337 Public Relations Theory (3 credits)
Prerequisite: COMM 226
This course examines theories in the field of public relations. Students will focus on the relationship between public relations and theory, discussing public relations from the lens of specific humanistic and social science theories. Special consideration of the value of theory to public relations and recent major theoretical movements in the field will be discussed.

COMM 338 Honors Tutorial (3 credits)
Prerequisite: Open to Commonwealth and Departmental Honors students, consent of the department
Special topics in speech communication will be discussed in this course. Three hourly meetings weekly. Fall semester.
COMM 339  Honors Tutorial (3 credits)
Prerequisite: Open to Commonwealth and Departmental Honors students, consent of the department
Special topics in speech communication will be discussed in this course. Three hourly meetings weekly. Spring semester.

COMM 340  Communication in the Family (3 credits)
Prerequisite: COMM 130
This course examines family interaction patterns and ways in which family members communicate, make decisions and settle conflict. Students examine portrayals of families in media and film in order to compare these images to scholarly research in communication studies. Course work focuses on an analysis of communication behaviors and activities of family members as these contribute to the development and maintenance of family relationships and systems.

COMM 341  Public Relations Case Studies (3 credits)
Prerequisite: COMM 226
This course addresses crucial dimensions of strategic planning and implementation of public relation programs and campaigns. Focus will be on managerial decision-making roles, strategies of communication selected, and the evaluation of the PR campaigns. Cases will be from business, government and the non-profit sector. Every other semester.

COMM 343  Nonverbal Communication (3 credits)
Prerequisite: COMM 130 or COMM 250
This course is designed to provide the student with theoretical knowledge and practical analytical application of the field of nonverbal communication and its importance in the field of communication.

COMM 345  Writing for Radio and Television (3 credits)
Prerequisite: COMM 240
Course content includes sports, documentaries, interviews, commercials, PSAs and/or comedy. This course requires knowledge of production elements used in radio and television.

COMM 349  Perspectives on the Holocaust (3 credits)
Cross Listed with INTD/PSYC 349
Prerequisite: COMM 130 and PSYC 100
This course introduces students to the study of the Holocaust. It examines the atmosphere and events that allowed the systematic extermination of 11 million non-combatants, including six million Jews. Multidisciplinary in approach, the course draws principally upon psychology and communication studies. Additionally, a variety of social science perspectives are utilized. This course is recommended for juniors and seniors. Offered once each year.

COMM 350  Documentary Film (3 credits)
Prerequisite: COMM 225
The course will examine the varying ways in which documentary film can illuminate the human condition or explore critical cultural issues facing society. Students will view several different styles of documentary and analyze the effectiveness of filmmakers' techniques and choices. Films studied may include works by Flaherty, Grierson, Lorentz, Riefenstahl and Wiseman.

COMM 352  Advanced Group Communication and Leadership (3 credits)
Prerequisite: COMM 130 and COMM 224 and COMM 260
This course will focus on the issues of group dynamics and leadership found at all levels of society. It will build on the fundamentals of group dynamics and leadership, which were covered in group communication, and provide advanced work in theory of groups and theory of leadership. Students will be expected to make significant analysis of all group dynamics and make recommendations for change. Offered once a year.

COMM 353  Corporate Communications and Social Responsibility (3 credits)
Prerequisite: COMM 226 and COMM 303
This course introduces students to the study of the ethics in decision-making concerning various communication practices within public relations and organizational communication. It introduces questions about the ethics and values of human communication in terms of the outcomes for the individual, the organization and greater society.

COMM 355  Images of Gender in Media (3 credits)
Prerequisite: COMM 229
This course considers images of men and women in contemporary media forms, including film, television and magazines. Students will learn to think about media images as products of social values and as consumer commodities, analyzing how gender is socially
constructed via body type, social roles, subcultures and consumer values, among other things. Students will also consider how images affect the way we construct ourselves and our lives.

COMM 356  International Study in Communication (3 credits)
Prerequisite: Application through the International Programs Office
This short-term international study course offers students first-hand exposure and interaction with foreign culture, customs and patterns of communication. Each faculty-led course includes pre-departure orientation sessions, lessons and activities at an international destination. Instruction will be in English. Course destinations and topics will vary. Contact the Department of Communication Studies or the International Programs Office for current study course details. Students may enroll more than once for different destinations and topics.

COMM 360  Argumentation and Advocacy (3 credits)
The theory and practice of argument in various fields, including debate, public address and interpersonal communication, will be explored in this course.

COMM 361  Gender Communication (3 credits)
Prerequisite: COMM 130 or COMM 250
This course investigates gender communication and its impact on the development of our gender identities as well as on the choices we make as communicators in our personal and public communications settings. An exploration of the concept of genderlect will be provided by reviewing its theoretical under-pinnings, research and the practical applications which can be used to enhance communication effectiveness between genders.

COMM 362  American Public Address (3 credits)
Prerequisite: COMM 130 or COMM 250
American Public Address is the study of the great speakers and great speeches which contributed to the development of the nation. The national issues are examined through the rhetoric of each era. Students will interpret arguments, cases, adaptive strategies and rhetorical choices.

COMM 364  Political Communication (3 credits)
Cross Listed with POLI 364
Prerequisite: Restricted to juniors or above or consent of the instructor
This class surveys political communication with an emphasis on forms, characteristics, and functions within political campaigns and institutional governance. Specific attention will be given to communication of the three branches of government. Students will gain a broad knowledge of how political communication can shape expectations and interpretations of current events, political actors and the political process.

COMM 365  Introduction to Intercultural Communication (3 credits)
Introduction to Intercultural Communication is a course designed to acquaint students with the factors which affect interpersonal relationships among people of differing cultural backgrounds. Foreign as well as native-born persons are encouraged to take the course. Course objectives are to enable students to become more sensitive to and tolerant of values and ideas expressed by others. Spring semester. (CSOC; CMCL)

COMM 366  Advanced Audio Production (3 credits)
Prerequisite: COMM 214
This course is an advanced examination of creating, writing, and producing audio materials for radio programming, television and film production, and for podcast and Webcast. It also includes an in-depth analysis of the medium, including commercials, news, features, documentaries and special programs.

COMM 368  Entertainment/Public Relations (3 credits)
Prerequisite: COMM 226
“Mass entertainment” in the commercial sector is a multibillion dollar industry with communication strategies that are increasingly global, powerful and lucrative. This course is designed to help the student develop an understanding of public relations in the contexts of entertainment, sports and tourism. By studying the strategies of existing campaigns and organizations, students will better understand how public relations decisions affect careers and culture.

COMM 370  Screenwriting (3 credits)
Prerequisite: COMM 215
This course introduces students to the theory, craft and the business of film writing. Using a mixture of screenwriting texts, video and Internet assignments, and individual and group activities, students will become familiar with key screenwriting concepts such as character development and three-act structure. No prior screenwriting experience is required, but a desire to think creatively and learn a craft through writing and revision is a must. Offered every other year.
COMM 371 Global Cinema (3 credits)  
Prerequisite: COMM 225  
This course surveys the breadth of cinema around the globe, investigating a range of international films, movements and traditions.

COMM 380 Broadcast Station Administration (3 credits)  
Prerequisite: COMM 224  
This course teaches students the fundamentals of radio and television programming and management. Programming for both public and commercial stations will be included. The problems of station management will be covered including regulations, personnel, sales, economics, program sources, grant writing, ratings and research. This course provides students with comprehensive assessment of the broadcast management experience.

COMM 390 Television Direction (Documentary) (3 credits)  
Prerequisite: COMM 290 or COMM 291  
This course will work with elements of television direction including script writing, storyboard, composition, framing, lighting, camera movement, music audio and sound effects, working with talent, format and genres of documentary video. Fall semester.

COMM 391 Public Relations Practicum (3 credits)  
Prerequisite: COMM 226  
This course is designed to provide students with the opportunity to integrate their communication skills through supervised application of these skills in a public relations setting. Using a 30-hour required field experience as a focal point, students will utilize research organizational thinking, writing and speaking skills throughout the semester. Either semester.

COMM 392 Public Relations Campaigns (3 credits)  
Prerequisite: COMM 312; and COMM 337 or COMM 341  
This advanced course incorporates progressive public relations theory with practice. Students research, develop and implement a strategic “real-life” campaign for a community-based client, serving as consultants, and by developing portfolio-worthy deliverables that bring value to the client’s communication plan. The service-learning course includes guidance to learn necessary content and skills in such topics as fundraising, creative messaging and efficient integrated communication strategies.

COMM 397 Cyber Culture and Digital Media (3 credits)  
Prerequisite: COMM 130  
This course examines the Internet and related digital and new-media technologies as communication within a range of economic, political and cultural contexts. The core of this investigation focuses on the ways in which digital media offer innovative channels for humans to share messages and make meaning, with emphasis on the interrelated issues of access (digital divide) and the increasingly global nature of digital communication (globalization). Through a variety of online and in-class individual and group exercises, students will learn and use basic Internet and new-media skills, and develop critical-thinking skills while exploring new-media environments.

COMM 399 Topical Studies (3 credits)  
Prerequisite: Dependent on topic  
Variable contemporary topics in communication will be discussed in this course. This course may be repeated for different topics. Either semester.

COMM 401 Film Theory and Criticism (3 credits)  
Prerequisite: COMM 225 or consent of instructor  
This course develops an advanced understanding of film as a complex cultural medium through the discussion of key theoretical and critical approaches. Theoretical and critical approaches discussed may include the following: realist theory, genre criticism, auteur theory, structuralism, feminist theory and journalistic criticism. The course combines weekly feature-length viewings with lectures, group discussions and written assignments.

COMM 402 Interpersonal Conflict Resolution (3 credits)  
Prerequisite: COMM 270 or consent of instructor  
This course introduces the theory, research and practice associated with interpersonal conflict resolution. Students seeking careers in public relations, sales, business, organizational development and advocacy will benefit from this analysis of communication processes. Fall semester. May be taken for graduate-level credit.

COMM 415 Advanced Television Production (Features) (3 credits)  
Prerequisite: COMM 390  
This course will give students television production experience. Topics will include scripting, budgeting, pre- and post-production protocols,
copyright and legal issues, studio and field production considerations, aesthetic issues and editing. The course will culminate in a 25-30 minute television project produced and directed by the student for his/her portfolio. May be taken for graduate-level credit.

**COMM 426** Critical Perspectives on Mass Communication (3 credits)
*Prerequisite: COMM 311 or consent of instructor*
This course focuses on theories of mass communication used for critiquing the major forms of mass media around the world. The theories include dramatism, semiotics, Marxist view, popular culture and rhetorical analysis. May be taken for graduate-level credit.

**COMM 430** Topics in Film (3 credits)
*Prerequisite: COMM 225 or consent of instructor*
This course offers the basics of film study and analysis in dominant and avant garde cinema. It exposes students to a diverse range of subject matter to provide a familiarity with aspects of a particular film style, movement, culture, media and/or film technology. Topics include, but are not limited to, various international directors, postmodernism, Francophone, Soviet, Swedish and Scandinavian, satire and parody, film noir and other genres and auteur. The course may be repeated for different topics.

**COMM 462** Patterns of International Communication (3 credits)
*Prerequisite: COMM 130*
This course is a study of communication systems throughout the world. Students will focus on media as it functions within a variety of political systems. Spring semester. May be taken for graduate-level credit. (CGCL)

**COMM 470** Organizational Communication: Events Planning (3 credits)
*Prerequisite: COMM 226*
In this class, students will analyze ways in which organizations communicate their image and message through events and promotions. Students will learn advanced organizational communication theory as it relates to events planning and will gain significant practice in planning, critiquing and analyzing events through case studies and attendance at actual events. Students will apply the theory to a practical, on-campus experience. The course will be taught using lecture, online assignments, class discussion and out-of-class project assignments.

**COMM 485** Honors Thesis (3 credits)
*Prerequisite: Open to Commonwealth and Departmental Honors students*
One-hour weekly meetings with the thesis director will culminate in an honors thesis. With the consent of the Departmental Honors Committee and the thesis director, this course may be extended into a second semester for three additional credits depending upon the scope of the project. Whether the final version of the thesis qualifies the student to graduate with honors will be determined by the Departmental Honors Committee. Offered either semester.

**COMM 492** Seminar in Corporate Communication (3 credits)
*Prerequisite: COMM 221 and COMM 222 and COMM 224; and COMM 226 or COMM 303; and two additional 300 level or higher COMM courses*
This seminar will pursue, in depth, selected themes and topics in the areas of public relations and organizational communication. (CWRM)

**COMM 495** Communication Studies Seminar (3 credits)
*Prerequisite: COMM 221 and COMM 222 and COMM 224*
This seminar will pursue, in depth, certain themes and topics in the area of the communication studies. Either semester. (CWRM)

**COMM 496** Seminar in Media Studies and Communication Technologies (3 credits)
*Prerequisite: COMM 221 and COMM 222 and COMM 224 and COMM 229 and COMM 311 and one additional 300-level or higher COMM course*
This seminar will pursue, in depth, certain themes and topics in the area of media studies and communication technologies. Either semester. May be taken for graduate-level credit. (CWRM)

**COMM 498** Internship in Communication (3-12 credits)
*Prerequisite: Consent of the department, formal application required*
This non-classroom experience is designed for a limited number of junior and senior majors to complement their academic preparation. Limited to 3-12 credits unless special circumstances at the work site require more involvement. Only three credits may be applied to the major elective requirement. This course may be repeated for a maximum of 15 credits. Graded on a (P) Pass/(N) No Pass basis. Either semester.
COMM 499  Directed Study in Communication (1-3 credits)
Prerequisite: Consent of the department, formal application required
Directed study is open to juniors and seniors who have demonstrated critical and analytical abilities in their studies and who wish to pursue a project independently. This course may be taken twice for a maximum of six credits. Offered either semester.

Communication Studies: Other Approved Courses

COMM 320  Mass Communication in Society (3 credits)
Prerequisite: COMM 229
This course reviews theory and research in the field of mass communication. Special attention will be paid to the evolution of the concept of the mass audience and current concerns about the effects of media content on individuals and society. Fall semester.

COMM 450  Persuasion (3 credits)
Prerequisite: COMM 222 and COMM 224
This course will examine persuasion as a tool for modifying the beliefs, attitudes and behaviors of others. Applications of persuasion to the fields of communication and mass communication including advertising, public relations, marketing, programming and station management, as well as the social and political dimensions of democracy.

- COMPUTER SCIENCE

COMP 105  Computers and Their Applications: An Introduction (3 credits)
The goal of this course is to provide a student with no previous computer experience the opportunity to become computer literate. The course consists of equal parts of textbook/lecture learning and hands-on experience with software such as an operating system, a spreadsheet, a word processor, presentation graphics and Internet services including electronic mail. The course is especially recommended for the new PC user but does not fulfill any requirements of the computer science major.

COMP 111  Elementary Visual Programming (3 credits)
This course provides an introduction to computer programming for non-computer science majors who have no previous programming experience. Topics include simple data types, control structure, and introduction to array and string data structure and algorithms, history of computer science, computer systems and environments. The course emphasizes object-oriented design and programming using the Alice programming system. Using Alice, students will write programs that produce 3-D computer animations.

COMP 135  Freshman Honors Colloquium (1 credit)
Prerequisite: Open to Commonwealth Honors students and to others at the discretion of the instructor
Freshman Honors Colloquia in computer science allow exceptionally able students to explore a challenging topic in small classes under close faculty supervision. Colloquia meet once a week for 50 minutes and culminate in a paper or scientific project, which provides the major part of the grade. The minimum enrollment is two and the maximum is 12. Topics vary from semester to semester. Fall semester.

COMP 136  Freshman Honors Colloquium (1 credit)
Prerequisite: Open to Commonwealth Honors students and to others at the discretion of the instructor
Freshman Honors Colloquium in computer science allow exceptionally able students to explore a challenging topic in small classes under close faculty supervision. Colloquia meet once a week for 50 minutes and culminate in a paper or scientific project, which provides the major part of the grade. The minimum enrollment is two and the maximum is 12. Topics vary from semester to semester. Spring semester.

COMP 151  Computer Science I (3 credits)
This is a beginning course in programming, which introduces concepts of computer organization. Problem-solving methods and algorithmic development stressing good programming style and documentation including top down and modular design will be covered. This course emphasizes problem solving with programming exercises run on the computer. Either semester. (Formerly COMP 101)

COMP 152  Computer Science II (3 credits)
Prerequisite: COMP 151
This course continues the coverage of the fundamental concepts of computer programming techniques including recursion, sorting, searching, subprograms and aggregate data types. Software engineering principles including program design, programming style and documentation started in COMP 151 will be continued. Students will write programming projects to demonstrate their mastery of these concepts. Either semester. (Formerly COMP 102)

COMP 199  First Year Seminar (3 credits)
Prerequisite: Open to all freshmen with a writing placement score of 3 or above or a SAT score of 500 or above or who have completed ENGL 101. Students with 24 or more transfer credits will have this requirement waived.

First Year Seminars (FYS) are writing-intensive, topic courses that introduce students to academic thought, discourse and practices. FYS courses prepare and orient students toward productive and fulfilling college careers by actively engaging them in a specific academic area of interest. Students will improve their writing, reading, research and basic information and technology skills while learning to work both collaboratively and independently. These courses will fulfill the First Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one FYS course may be taken for credit. (CFYS)

COMP 202 Transitions in Programming (1 credit)
Prerequisite: COMP 152
In this course students will learn and practice the skills needed in upper level computer science classes. Very often the language used for introductory computer science classes is not the same as that used in more advanced courses. Some languages hide programming details that others expose. This course will be offered in whatever languages the department deems to be currently appropriate for upper level computer science courses. This course may be repeated for a maximum of three credits for different programming languages.

COMP 203 Programming and Computer Algebra (3 credits)
Prerequisite: MATH 151 or MATH 141, which may be taken concurrently.
In this course, students will solve problems by writing computer programs that include input, output and control structures (sequence, selection, repetition). In addition, the student will learn and use some of the tools of a computer algebra system and do programming in the system. Note: A mathematics or computer science major who has successfully completed COMP 151 may not take this course for credit.

COMP 206 Introduction to Computer Organization (3 credits)
Prerequisite: COMP 152
In this course, the organization and structure of major hardware components of computers; mechanics of information transfer and control within a digital computer system, and the fundamentals of logic design will be covered. The major emphasis of the course concerns the functions of and communication between the large scale components of a computer system, including properties of I/O devices, controllers and interrupts. Spring semester.

COMP 220 Topics in Programming Languages (3 credits)
Prerequisite: COMP 152 or equivalent
This course provides an introduction to different programming languages such as Java and Smalltalk. It is intended as a course for students who have previously programmed but want to explore different programming languages. It does not count as a departmental elective for computer science majors. This course may be repeated for credit with different language topics.

COMP 286 Sophomore Honors Colloquium (1 credit)
Prerequisite: Open to Commonwealth Honors students and to others at the discretion of the instructor
Sophomore Honors Colloquia in computer science allow exceptionally able students to explore a challenging topic in small classes under close faculty supervision. Colloquia meet once a week for 50 minutes and culminate in a paper or scientific project, which provides the major part of the grade. The minimum enrollment is two and the maximum is 12. Topics vary from semester to semester. Fall semester.

COMP 287 Sophomore Honors Colloquium (1 credit)
Prerequisite: Open to Commonwealth Honors students and to others at the discretion of the instructor
Sophomore Honors Colloquia in computer science allow exceptionally able students to explore a challenging topic in small classes under close faculty supervision. Colloquia meet once a week for 50 minutes and culminate in a paper or scientific project, which provides the major part of the grade. The minimum enrollment is two and the maximum is 12. Topics vary from semester to semester. Spring semester.

COMP 298 Second Year Seminar (Speaking Intensive) (3 credits)
Prerequisite: _ _ _ _ 199; Open to all sophomores and juniors who have completed ENGL 101, and the speaking skills requirement. Students with 54 or more transfer credits will have this requirement waived. Cannot be taken if _ _ _ _ 299 is taken for credit.
Second Year Seminars (SYS) are speaking-intensive, topic courses that build on the academic skills and habits introduced in the First Year Seminar. SYS courses engage students in a specific academic area of interest and provide them with the opportunity to reinforce, share and interpret knowledge. Students will improve their speaking, reading, research and basic information and technology skills while building the connections between scholarship and action that are required for lifelong learning. These courses will fulfill the Second Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one SYS course may be taken for credit. (CSYS)

COMP 299 Second Year Seminar (Writing Intensive) (3 credits)
Prerequisite: _ _ _ _ 199; Open to all sophomores and juniors who have completed ENGL 101 and ENGL 102. Students with 54 or more transfer credits will have this requirement waived. Cannot be taken if _ _ _ _ 298 is taken for credit.

Second Year Seminars (SYS) are writing-intensive, topic courses that build on the academic skills and habits introduced in the First Year Seminar. SYS courses engage students in a specific academic area of interest and provide them with the opportunity to reinforce, share and interpret knowledge. Students will improve their writing, reading, research and basic information and technology skills while building the connections between scholarship and action that are required for lifelong learning. These courses will fulfill the Second Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one SYS course may be taken for credit. (CSYS)

COMP 330 Data Structures and Algorithms (3 credits)
Prerequisite: COMP 152
In this course, static, semistatic and dynamic data structures and techniques for the analysis and design of efficient algorithms which act on data structures will be addressed. Course topics will include arrays, records, stacks, queues, deques, linked lists, trees, graphs, sorting and searching algorithms, algorithms for insertion and deletion and the analysis and comparison of algorithms. Spring semester.

COMP 338 Honors Tutorial (3 credits)
Prerequisite: Open to Commonwealth and Departmental Honors students and consent of the department
Special topics in computer science will be offered. Three hourly meetings weekly. Fall semester.

COMP 339 Honors Tutorial (3 credits)
Prerequisite: Open to Commonwealth and Departmental Honors students and consent of the department
Special topics in computer science will be offered. Three hourly meetings weekly. Spring semester.

COMP 340 Organization of Programming Languages (3 credits)
Prerequisite: COMP 330 and MATH 130
This course is an introduction to the structure of programming languages. Formal specification of syntax and semantics; structure of algorithmic, list processing, string manipulation, data description and simulation languages; basic data types, operations, statement types and program structure; and run-time representation of program and data will be included. Particular emphasis will be placed on block-structured languages (ALGOL-68, Pascal, Ada, C) and interpreted languages (APL, LISP, SNOBOL). Programming assignments made in several languages are required. Offered spring semester.

COMP 345 Compiler Construction (3 credits)
Prerequisite: COMP 330 and COMP 340
This course includes compiler structure; lexiysis, syntax analysis, grammars, description of programming language, automatically constructed recognizers, and error recovery; semantic analysis, semantic languages, semantic processes, optimization techniques and extendible compilers. Students will write a sample compiler in this course.

COMP 350 Operating Systems (3 credits)
Prerequisite: COMP 206 and COMP 330
Discussion of the organization and structure of operating systems for various modes of computer use from simple batch systems to time-sharing/multiprocessing systems are covered in this course. Topics include concurrent processing, memory management, deadlock, file systems, scheduling, etc. Programming assignments made in a high-level language with concurrent processing feature are required. Fall semester.

COMP 399 Topics in Computer Science (3 credits)
Prerequisite: Varies dependent on topic
Topics of special and current interest not covered in other courses will be offered. This course may be repeated for different topics.

COMP 405 Introduction to Database Systems (3 credits)
Prerequisite: MATH 130 and COMP 330
This course includes physical data organization; the hierarchical, network and relational data models; design theory for relational database, data dependencies, normal forms and preventing loss of information; query optimization; and integrity and security of databases. Students will implement applications on a relational database system. May be taken for graduate-level credit.

COMP 410 Database Applications (3 credits)
In this course, the role of a database in an MIS environment is studied. Team analysis and implementation of a database project will be a major course component. This course does not fulfill computer science major requirements. May be taken for graduate-level credit.

COMP 426 2D Game Design (3 credits)
Prerequisite: COMP 330
In this course we will look at the whole life cycle of game development. We will focus on 2D games, avoiding some of the implementation details that hinder the development of 3D games. Students will begin with sketching out ideas, implement 2D graphics-based games. Students will experiment with 2D game concepts like scrolling, tiled maps and creating the illusion of infinite space. We will look at game Artificial Intelligence including pathing and goal selection. Students will also explore issues of art selection for games, including copyright issues and intellectual property.

COMP 427  Internet Programming (3 credits)
Prerequisite: COMP 340
This is an introductory course on Internet programming. Students in this course will learn about the Internet and its fundamental request-response paradigm. Topics to be covered include fundamentals of the Web, client/server architectures, Internet protocols and programming.

COMP 430  Computer Networks (3 credits)
Prerequisite: COMP 330
This course includes an introduction to data transmission, digital multiplexing and data switching, characteristics of transmission media, terminals, modems and communication processes; design of error control, line control, and information flow control procedures; study of message and packet switching networks; protocols and software in packet switching systems; and modeling techniques for networks. May be taken for graduate-level credit.

COMP 435  Analysis of Algorithms (3 credits)
Prerequisite: COMP 330
This course is a general overview of algorithms, including algorithmic techniques needed in problem solving, and relative efficiency of algorithms. Topics will include efficient algorithms for data manipulation, graphical analysis, rapid evaluation of algebraic functions and matrix operations, and NlogN bound in sorting algorithms. May be taken for graduate-level credit.

COMP 436  Computer Graphics (3 credits)
Prerequisite: COMP 330; and either MATH 120 or MATH 202
This course includes an introduction to hardware, algorithms and software of computer graphics. Topics include line generators, affine transformations, line and polygon clipping, splines, interactive techniques, menus, orthographic and perspective projections, solid modeling, hidden surface removal, lighting models and shading. May be taken for graduate-level credit.

COMP 437  Simulation and Game Design (3 credits)
Prerequisite: COMP 436
This course introduces techniques used to design and implement computer games. Topics include a historic overview of computer games, the preparation of game documents and the use of a game engine, modeling software and terrain generator. A game will be designed and implemented in a team environment.

COMP 442  Object-Oriented Software Engineering (3 credits)
Prerequisite: COMP 330
This is a project course in the development of a large-scale software system using OO methodologies. The primary process involves discovering classes and objects that model both the application domain and the solution space, identifying the semantics of these classes and objects and establishing relationships among them, and implementing the classes and objects using appropriate data structures and algorithms. This primary process is controlled by a well-defined development framework with the following steps: 1) establishing core requirements, 2) providing a model of the system's behavior, 3) creating an architecture for the implementation, 4) evolving the implementation through successive iterations, and 5) maintaining the system. May be taken for graduate-level credit.

COMP 445  Logic Programming (3 credits)
Prerequisite: Junior or senior mathematics or computer science major or equivalent background; and consent of the department
This course will introduce the student to the logical programming paradigm using a language such as Prolog or LISP. May be taken for graduate-level credit.

COMP 450  Introduction to Robotics (3 credits)
Cross Listed with MATH 460
Prerequisite: COMP 330
This course is an introduction to the theory of the motion of robot manipulators. The mathematics, programming and control of manipulators will be emphasized. Issues of sensing and planning will also be examined. May be taken for graduate-level credit.

COMP 470  Introduction to Artificial Intelligence (3 credits)
Prerequisite: Restricted to computer science majors and completion of 29 credits of computer science courses in the major
This course introduces students to the basic concepts and techniques of artificial intelligence. Emphasis is given to representation and the associated data structures. Students will also be introduced to an AI language such as LISP. May be taken for graduate-level credit.

COMP 485 Honors Thesis (3 credits)
Prerequisite: Open to Commonwealth and Departmental Honors students
One-hour weekly meetings with the thesis director will culminate in an honors thesis. With the consent of the Departmental Honors Committee and the thesis director this course may be extended into a second semester for three additional credits depending upon the scope of the project. Whether the final version of the thesis qualifies the student to graduate with honors will be determined by the Departmental Honors Committee. Offered either semester.

COMP 498 Internship in Computer Science (3 credits)
Prerequisite: A minimum of 24 approved hours in computer science and consent of the department; formal application required
In this course, students will work for an employer in the computer science field for a minimum of 10 hours/week during one full semester. A member of the department will serve as adviser and evaluator of all work projects. This course can be taken only once for credit. Graded on a (P) Pass/(N) No Pass basis.

COMP 499 Directed Study in Computer Science (1-3 credits)
Prerequisite: Consent of the department; formal application required
Directed study is open to juniors and seniors who have demonstrated critical and analytical abilities in their studies and who wish to pursue a project independently. This course may be taken twice for a maximum of six credits.

COMP 502 Research (3 credits)
Prerequisite: Consent of the department; formal application required
Original research is undertaken by the graduate student in their field. This course culminates in capstone project. For details, consult the paragraph titled “Directed or Independent Study” in the “College of Graduate Studies” section of this catalog.

COMP 503 Directed Study (1-3 credits)
Prerequisite: Consent of the department; formal application required
Directed study is designed for the graduate student who desires to study selected topics in a specific field. For details, consult the paragraph titled "Directed or Independent Study" in the "College of Graduate Studies" section of this catalog. This course may be repeated for a maximum of six credits.

COMP 510 Topics in Programming Languages (3 credits)
Prerequisite: Admission to the MS program in Computer Science or consent of instructor
This course investigates programming language development from designer’s, user’s and implementer’s point of view. Topics include formal syntax and semantics, language system, extensible languages and control structures. There is also a survey of intralanguage features, covering ALGOL-60, ALGOL-68, Ada, Pascal, LISP, SNOBOL-4 APL, SIMULA-67, CLU, MODULA, and others.

COMP 520 Operating Systems Principles (3 credits)
Prerequisite: Admission to the MS program in Computer Science or consent of instructor
This course examines design principles such as optimal scheduling; file systems, system integrity and security, as well as the mathematical analysis of selected aspects of operating system design. Topics include queuing theory, disk scheduling, storage management and the working set model. Design and implementation of an operating system nucleus is also studied.

COMP 525 Design and Construction of Compilers (3 credits)
Prerequisite: Admission to the MS program in Computer Science or consent of instructor
In this course, topics will include lexical and syntactic analysis; code generation; error detection and correction; optimization techniques; models of code generators; and incremental and interactive compiling. Students will design and implement a compiler.

COMP 530 Software Engineering (3 credits)
Prerequisite: Admission to the MS program in Computer Science or consent of instructor
Topics in this course will include construction of reliable software, software tools, software testing methodologies, structured design, structured programming, software characteristics and quality and formal proofs of program correctness. Chief programmer teams and structure walk-throughs will be employed.

COMP 536 Graphics (3 credits)
Prerequisite: Admission to the MS program in Computer Science or consent of instructor
This course examines typical graphics systems, both hardware and software. Topics include design of low-level software support for raster
and vector displays, three-dimensional surface and solids modeling, hidden line and hidden surface algorithms. Shading, shadowing, reflection, refraction and surface texturing are also included.

**COMP 540 Automata, Computability and Formal Languages (3 credits)**
*Prerequisite: Admission to the MS program in Computer Science or consent of instructor*
Topics in this course will include finite automata and regular languages, context-free languages, Turing machines and their variants, partial recursive functions and grammars, Church’s thesis, undecidable problems, complexity of algorithms and completeness.

**COMP 545 Analysis of Algorithms (3 credits)**
*Prerequisite: Admission to the MS program in Computer Science or consent of instructor*
This course deals with techniques in the analysis of algorithms. Topics to be chosen from among the following: dynamic programming, search and traverse techniques, backtracking, numerical techniques, NP-hard and NP-complete problems, approximation algorithms and other topics in the analysis and design of algorithms.

**COMP 560 Artificial Intelligence (3 credits)**
*Prerequisite: Admission to the MS program in Computer Science or consent of instructor*
This course is an introduction to LISP or another AI programming language. Topics are chosen from pattern recognition, theorem proving, learning, cognitive science and vision. It also presents introduction to the basic techniques of AI such as heuristic search, semantic nets, production systems, frames, planning and other AI topics.

**COMP 562 Expert Systems (3 credits)**
*Prerequisite: COMP 560*
Architectures currently used in building expert systems are studied in this course.
The main current systems are surveyed along with expert system environments and tools.

**COMP 565 Logic Programming (3 credits)**
*Prerequisite: Admission to the MS program in Computer Science or consent of instructor*
This course is an introduction to first order predicate logic as a problem-solving tool. Logic programming languages such as PROLOG are studied along with applications of logic programming to mathematics fields, natural language processing and law.

**COMP 570 Robotics (3 credits)**
*Prerequisite: Admission to the MS program in Computer Science or consent of instructor*
This is a project-oriented course in robotics. Topics are chosen from manipulator motion and control, motion planning, legged-motion, vision, touch sensing, grasping, programming languages for robots and automated factory design.

**COMP 575 Natural Language Processing (3 credits)**
*Prerequisite: COMP 560*
This is a historical survey of question-answering systems. Topics include analysis and computational representation of syntactic and semantic structures for artificial intelligence application using English; current text systems; simulation of brief systems and other aspects of cognition; use of natural language systems; and generation of text or speech.

**COMP 580 Database Systems (3 credits)**
*Prerequisite: Admission to the MS program in Computer Science or consent of instructor*
In this course, topics will include relational, hierarchical and network data models; design theory for relational databases and query optimization; classification of data models, data languages; concurrency, integrity, privacy; modeling and measurement of access strategies; and dedicated processors, information retrieval and real time applications.

**COMP 582 Distributed Database Systems (3 credits)**
*Prerequisite: COMP 580*
The problems inherent in distributed databases on a network of computer systems are studied in this course, including file allocation, directory systems, deadlock detection and prevention, synchronization, query optimization and fault tolerance.

**COMP 590 Computer Architecture (3 credits)**
*Prerequisite: Admission to the MS program in Computer Science or consent of instructor*
This course is an introduction to the internal structure of digital computers including design of gates, flip-flops, registers and memories to perform operations on numerical and other data represented in binary form; computer system analysis and design; organizational dependence on computations to be performed; and theoretical aspects of parallel and pipeline computation.
COMP 594  Computer Networks (3 credits)
Prerequisite: Admission to the MS program in Computer Science or consent of instructor
This course provides an introduction to fundamental concepts in computer networks, including their design and implementation. Topics include network architectures and protocols, placing emphasis on protocol used in the Internet; routing; data link layer issues; multimedia networking; network security; and network management.

COMP 596  Topics in Computer Science (3 credits)
Prerequisite: Admission to the MS program in Computer Science or consent of instructor
In this course, topics are chosen from program verification, formal semantics, formal language theory, concurrent programming, complexity or algorithms, programming language theory, graphics and other computer science topics. This course may be repeated for credit with different topics.

COMP 599  Computer Science Seminar (3 credits)
Prerequisite: Minimum of 12 credits in 500-level science course work
This is a project-oriented seminar in computer science. Projects will be individually assigned.

Computer Science: Other Approved Courses

COMP 100  Programming in BASIC (3 credits)
This course covers problem solving and principles of computer programming taught with the aid of the BASIC language. Topics to include the LET, INPUT, READ, IF and FOR statements; arrays; numerical and string functions; and other topics as time allows.

COMP 211  COBOL II (3 credits)
This course is a continuation of topics of structured COBOL programming. Topics to be covered will include the following: multilevel tables, subprograms, input editing, report writer facility, the sort facility, sequential files, indexed sequential files and relative files. Creation and file update for sequential and indexed sequential files will be addressed.

COMP 395  Computer Science Seminar (3 credits)
Prerequisite: A minimum of 24 approved hours in computer science and consent of the department
This course includes the interdisciplinary uses of computers. Problems arising through the increasing use of computers in our society will be addressed. This seminar will be project oriented and students will present their work to the class for discussion and criticism.

COMP 550  Topics in Discrete Mathematics (3 credits)
Prerequisite: Consent of instructor
In this course, topics will include context-free languages, graph theory, combinatorics, optimization theory, linear programming and error correcting codes.

COUNSELING - GENERAL

CNGC 500  Research and Evaluation (3 credits)
This course is designed to help prepare counselor education students who intend to work in mental health, PreK-12 or higher education settings, and who may also be seeking licensure as one or more of the following: Licensed Mental Health Counselor (LMHC), School Social Worker/School Adjustment Counselor, or School Counselor as practitioner-scientists. The purpose of this course is to provide a framework for counselors to evaluate the efficiency of research studies that have implications for the practice of counseling. Students will become familiar with research methods, statistical analysis, needs assessment and program evaluation as it relates to the counseling profession. Students will be exposed to ethical and legal considerations, diversity and equity as it relates to conducting research in counseling.

CNGC 501  Orientation to Counseling (1.5 credits)
This course provides students who intend to work in the counseling profession with an orientation to the field of counseling. Students will be exposed to various employment opportunities and settings in the counseling profession through a combination of classroom experiences and a field-based learning component. Students will acquire hands-on experience in the field working with their potential population of interest. Students will complete a total of 15 hours of field-experience in addition to attending lectures. Central to this course will be an ongoing self-evaluation of the students' attitudes, values and interpersonal skills for choosing counseling as a potential profession. The student will be provided with an overview of the core requirements and competencies necessary to becoming a professional counselor. Threaded throughout this course are: competencies in technology, professionalism and multiculturalism. This
course may not be used to fulfill the degree requirements of any counseling program. This course may be used to fulfill admissions requirement for a degree program within the Department of Counselor Education.

CNGC 502  Research (3 or 6 credits)
Prerequisite: Consent of the department; formal application required
Original research is undertaken by the graduate student in their field. For details, consult the paragraph titled “Directed or Independent Study” in the “School of Graduate Studies” section of this catalog. This course may be repeated for a maximum of six credits.

CNGC 503  Directed Study (1-3 credits)
Prerequisite: Completion of 15 approved graduate credits and acceptance in the counseling program; consent of the department; formal application required
Directed study is designed for the graduate student who desires to study selected topics in the counseling field or engage in fieldwork in addition to what is required in each program option. For details, consult the paragraph titled “Directed or Independent Study” in the “School of Graduate Studies” section of this catalog. This course may be repeated for a maximum of six credits.

CNGC 504  Research and Evaluation II (3 credits)
Prerequisite: CNGC 500 or PSYC 500 or SCWK 541; and matriculation in MEd or CAGS or Postmaster's in Counseling or MA in Psychology or MSW
The completion of a research project is the main objective of this course, which is designed to facilitate the academic and professional development of the advanced graduate student. This counseling focused research project must be an original work.

CNGC 515  Performance Psychology for Athletes and Performance Artists (3 credits)
This course will examine various performance enhancement protocols utilized in sports and the performing arts. Performance psychology is concerned with the psychological aspects of performance in sport, exercise, performing arts, business and life (i.e., enhancing well-being, test anxiety, etc.). This is a practice-based course where students will examine theories and interventions used to enhance performance and overall well-being as well as the practical application of skills.

CNGC 520  Group Experience (0 credit)
Prerequisite: Must be taken concurrently with CNGC 538
All matriculated MEd counselor education students are required to participate in a confidential, small-group experience provided by the department. This non-graded, eight-session activity will be facilitated by a licensed clinician who is not a member of the faculty and will provide counselors-in-training with direct experience as a member of a group. Completion of this requirement is a prerequisite for the Advanced Applied Counseling Course. This course is graded on an (P) Pass/(N) No Pass basis.

CNGC 528  Counseling and Development (3 credits)
This course will introduce the counselor education student who intends to work in mental health, PreK-12 or higher education settings, and who may also be seeking licensure as one or more of the following: Licensed Mental Health Counselor (LMHC), School Social Worker/School Adjustment Counselor, or School Counselor, to counseling theory and practice in the context of human development, culture and other contextual factors. Diversity will be broadly defined and include, but not be limited to ethnicity, race, spirituality, gender, SES and sexual orientation. The major counseling theories will be examined with respect to their overall worldview, underlying value systems and related compatibility with mainstream and disenfranchised populations, their perspective on human development and clinical application. Although primary course emphasis will be on counselor self-reflection and working with individual clients, secondary focus will be on ecological/system approaches and prevention strategies.

CNGC 529  Multicultural Counseling (3 credits)
Prerequisite: CNGC 528, which may be taken concurrently
This skill-based course will further develop the students' working knowledge and basic competency in multicultural counseling theory and application. For the counseling student who intends to work in mental health, PreK-12 or higher education settings, and who may also be seeking licensure as one or more of the following: LMHC, School Social Worker/School Adjustment Counselor, or School Counselor. To this end, the course will focus on the counselor on both a professional and personal level. Additionally, the course will examine salient client population-specific issues related to the life experiences and world view of the culturally different client and how such experiences impact on the counseling relationship and therapeutic process. Underlying values and assumptions associated with widely used traditional counseling interventions and their appropriateness with disenfranchised populations will be explored. Traditional and nontraditional culturally-consonant counseling approaches will also be discussed.

CNGC 538  Group I: Theory and Process of Group Interaction (3 credits)
Prerequisite: CNGC 528; or PSYC 509; and matriculation in the MEd or CAGS or postmaster's program in counseling or MA in Psychology program; must be taken concurrently with CNGC 520
Group I is an experiential course designed to provide students who intend to work in mental health, PreK-12 or higher education settings, and who may also be seeking licensure as one or more of the following: LMHC, School Social Worker/School Adjustment Counselor or School Counselor, with the opportunity to co-facilitate, participate, observe and analyze group process. Emphasis will be placed on the synthesis of leadership, membership and purpose, as well as the development of various types of groups and counseling applications for a variety of settings.

CNGC 539 Introduction to Career Counseling (3 credits)
This course will review concepts, issues, trends and tools as they relate to career development. It is designed to consider the role of the professional counselor in the career decision-making process embedded within lifestyle and life-stage factors. Topics will include, but not be limited to, career development theory, career assessment tools, interest, skills and personality inventories, career resource materials, technology and the implementation of career counseling strategies.

CNGC 542 Group II: The Facilitation of Group Experience (3 credits)
Prerequisite: CNGC 538
Group II is an advanced-level course that provides students with an opportunity to enhance their group counseling skills and repertoire as well as increase their ability to apply theory to practice. This course uses both experiential and discussion methods of teaching to facilitate learning.

CNGC 544 Introduction to Reality Therapy (3 credits)
This course is designed to bring about an awareness and an understanding of the philosophy and basic concepts of Reality Therapy. Modalities of learning will include the following: didactic presentation, role-play, lecture and group process.

CNGC 560 Special Topics in Counseling (1-3 credits)
Special topics of current relevance in counseling will be offered from time to time. The topic to be addressed will be announced prior to registration. This course may be repeated for different topics.

CNGC 561 Grief Counseling (3 credits)
This course is an introduction to the theory and application of grief models as they apply to individuals and families, including techniques and strategies to assist clients and students dealing with issues related to grief and loss in a variety of settings (school, mental health, college/student affairs). The course will stress the importance of the professional counselor's self-awareness and counselor impact on the therapeutic process, as well as the role of ritual, spirituality and multicultural perspectives on grief. At the core of the course will be a respect for the client's cultural contextual, a recognition of the importance of culture and other critical intervening factors on the counseling and grief process, and the maintenance of high ethical standards.

CNGC 563 Psychopharmacology for Nonmedical Professionals (3 credits)
This course is for the counseling student who intends to work in mental health or PreK-12 settings, and who may also be seeking licensure as one or more of the following: Licensed Mental Health Counselor (LMHC), School Social Worker/School Adjustment Counselor or School Counselor. It examines modern medication treatments for psychological disorders, including schizophrenia, mania, depression and anxiety. Additional problems such as ADHD/ADD, steroids, alcohol and cigarette dependency, street drugs and inhalants will be examined. Types of medications reviewed are the following: antipsychotics, antidepressants, antianxiety, sedative-hypnotics, over-the-counter and herbal alternatives are discussed in conjunction with diagnostic factors, effectiveness, side effects, risk and biological actions.

CNGC 567 Marital and Family Therapy (3 credits)
This course is an examination of schools of family systems and treatment intervention options. Attention will be given to the history and development of marital family therapy, current schools of therapy, intervention strategies and the role of the counselor in marital and family work. Professional standards for marital and family therapy will be reviewed.

CNGC 582 Preventive Counseling (3 credits)
This course is for the counseling student who intends to work in mental health, PreK-12 or higher education settings, and who may also be seeking licensure as one or more of the following: Licensed Mental Health Counselor (LMHC), School Social Worker/Adjustment Counselor or School Counselor. It will explore the wide variety of factors in society and the community that affect the well-being of the client in school, agency/community and higher education settings. Emphasis will be on addressing human problems through community counseling and consultation within a framework of multiculturalism, professional standards and equity, and using technology to enhance the development and delivery of community counseling interventions. Topics include consultation, referral, program development, intervention strategies, outreach, general systems theory, community counseling, person/environment “fit” and action/evaluation research.

CNGC 585 Capstone in Counseling – Portfolio (3 credits)
Prerequisite: Consent of department chairperson
This course is designed to assist students in successfully creating a capstone portfolio that demonstrates mastery of the basic competencies necessary to function as a counseling professional. Students’ projects will utilize the core areas of their discipline in accordance with the CACREP (Council for the Accreditation of Counseling and Related Educational Programs) standards. Students must successfully present their final capstone portfolio at a formal capstone defense meeting. This course is graded on a (P)Pass/(N)No Pass basis.

**CNGC 586 Capstone in Counseling -- Project Paper (3 credits)**

*Prerequisite: Consent of department chairperson*

This course is designed to assist students in successfully creating a capstone project paper that demonstrates mastery of the basic competencies necessary to function as a counseling professional. Students’ projects will utilize the core areas of their discipline in accordance with the CACREP (Council for the Accreditation of Counseling and Related Educational Programs) standards. Students must successfully present their final capstone project paper at a formal capstone defense meeting. This course is graded on a (P)Pass/(N)No Pass basis.

**CNGC 620 Multicultural Counseling II (3 credits)**

*Prerequisite: CNGC 529*

This advanced-level, competency-based course is designed for professional counselors and advanced-level graduate students in counseling who are interested in increasing their knowledge and skill in the fourth “force” of counseling -- Multicultural Counseling and Therapy. Emphasis will be on operationalization of the components of multicultural competence as identified by the American Counseling Association. Primary focus will be on increasing knowledge and skills in the areas of assessment, intervention planning, and service delivery, understanding and effectively responding to bias and hate incidents and crimes, facilitating “praxis” consultation, legal and ethical issues, and continued self-awareness/professional development in this area. Students will also develop a diversity-related philosophy statement and technology product to be included in their counseling portfolio.

**CNGC 625 Enhancing Counseling and Prevention through Technology (3 credits)**

*Prerequisite: CNGC 582 or consent of instructor*

This advanced-level course is designed for professional counselors and advanced-level graduate students in counseling who are interested in increasing their knowledge and skill in the ways technology can be used to develop, deliver and evaluate counseling and prevention services, materials and programs. The course will build upon the student's earlier courses and experiences and will primarily focus on competency and skill-building to increase student effectiveness in this area. Emphasis will be on readily available software applications whose use can be modified to enhance and customize counseling interventions, as well as those which are integral to the functioning of the school counselor and in which familiarity and initial competency is expected by school systems. Topics will include use of the Internet, scheduling programs, record keeping systems, presentation and publishing software applications, career and college exploration, developing customized computer-generated counseling materials, electronic mail, data management, photo/graphic editing and importing, multimedia applications and Web pages/Web sites. Legal and ethical issues related to the use of technology, as well as diversity issues will be threaded throughout the course. All topics will be explored from a guidance and counseling perspective. Much of the work for the course will take place within population-specific small groups.

**CNGC 630 Child and Adolescent Psychopathology (3 credits)**

This advanced level course for the professional counselor will examine the nature, etiology, consequences and prevention/treatment of the major emotional issues/disorders of children and adolescents. Childhood behavior will be considered from a developmental viewpoint for counselors in schools and the community and will include emotional problems of children as well as psychopathological disorders. Primary emphasis will be on understanding the psychological factors which constitute difficulties in children’s academic, social and personal development. This course will also provide an examination of the classification, diagnostic criteria, and differential diagnosis according to the current *Diagnostic and Statistical Manual of Mental Disorders* (DSM).

**CNGC 660 Special Topics in Counseling (1-3 credits)**

Special topics of current relevance in counseling will be offered from time to time. The topic to be addressed will be announced prior to registration. This course may be taken more than once with the consent of the adviser.

**Counseling - General: Other Approved Courses**

**CNGC 571 Practicum: School Guidance Counselor (PreK-8) (9 credits)**
Prerequisite: Successful completion of CNSG 570 and a fieldwork application approved by the Counseling Programs Committee
This fieldwork experience is completed in the role of School Guidance Counselor at a PreK-8 educational site approved by the Counseling Programs Committee. This fieldwork experience includes a minimum of 450 clock hours at the fieldwork site. The student must have successfully completed pre-practica hours prior to beginning this fieldwork experience. Students must submit an application by the first week in April for the fall semester practicum and November for the spring semester. This course fulfills the Department of Education practicum requirements for school guidance counselor licensure effective October 1994.

CNGC 572 Practicum: School Guidance Counselor (5-12) (9 credits)
Prerequisite: Successful completion of CNSG 580 and a fieldwork application approved by the Counseling Programs Committee
This fieldwork experience is completed in the role of School Guidance Counselor at a 5-12 educational site approved by the Counseling Programs Committee. This fieldwork experience includes a minimum of 450 clock hours at the fieldwork site. The students must have successfully completed pre-practica hours prior to beginning this fieldwork experience. Students must submit an application by the first week in April for the fall semester practicum and November for the spring semester. This course fulfills the Department of Education practicum requirements for school guidance counselor licensure effective October 1994.

CNGC 592 Internship in Student Affairs Counseling (9 credits)
This fieldwork experience is for advanced counseling students seeking employment in higher education settings. Students must complete a minimum of 450 fieldwork hours at a site approved by the Counseling Programs Committee. Students must submit an internship application in April for the fall semester and in November for the spring semester.

- COUNSELING - MENTAL HEALTH

CNMH 532 Psychological Assessment (3 credits)
Prerequisite: CNGC 500
This course will examine the basic principles and components of individual and group psychological assessment and is designed for the counselor education student who intends to work in mental health settings or PreK-12 settings, and who may also be seeking licensure as one or more of the following: Licensed Mental Health Counselor (LMHC) or School Social Worker/School Adjustment Counselor. The student will be introduced to the most commonly used assessment tools and practices for measuring intelligence, achievement, aptitude, interest, career and personality. Basic concepts of standardized testing and statistical concepts such as measures of central tendency, variability, norm and criterion referenced tests and types of reliability and validity will be explained for each test discussed. Critical issues and procedures such as technology, ethical, diversity and multicultural aspects related to the administration, scoring, interpretation and report writing for individual and group tests will be emphasized. (Formerly CNGC 532)

CNMH 534 The Professional Counselor: Standards, Ethics and Legal Issues (3 credits)
This course, which is for the graduate counseling student who intends to work in mental health or PreK-12 settings, and who is seeking licensure as a Licensed Mental Health Counselor (LMHC) or School Social Worker/School Adjustment Counselor, will examine the current trends in the area of ethical and legal issues that affect the professional counselor, as well as the process of ethical decision-making. Legal and ethical issues dealing with informed consent, confidentiality, duty to warn, neglect and abuse, family rights and special education will be among the topics to be studied. Ethical standards of the ACA and codes germane to specific counseling associations will be reviewed and discussed. Guidelines and competencies for working with multicultural and other special populations will also be examined.

CNMH 535 Applied Counseling: Adolescent-Adult (3 credits)
Prerequisite: CNGC 528 and matriculation in the MEd or CAGS or postmaster's program in counseling
In this course, awareness of characteristics and behaviors that influence the helping process will be explored, such as developmental issues, multicultural, ascribed and achieved personality characteristics. Students who intend to work with adolescents and/or adults in school or mental health settings, and who may also be seeking licensure as one or more of the following: Licensed Mental Health Counselor (LMHC) or School Social Worker/School Adjustment Counselor will develop basic interviewing and counseling skills for the purpose of establishing a therapeutic relationship, diagnosis of client problems and implementing appropriate counseling treatment goals within the ethical guidelines. (Formerly CNGC 535)

CNMH 536 Applied Counseling: Pre-Adolescent (3 credits)
This course is designed to assist the counseling student who intends to work in mental health or PreK-12 settings, and who may also be seeking licensure as one or more of the following: Licensed Mental Health Counselor (LMHC) or School Social Worker/School Adjustment Counselor, with learning effective therapeutic techniques for working with young children. The course will examine developmental child psychopathology from a constructivist perspective. Using this model, various approaches to child therapy and collaboration skills will be applied and evaluated. No preferred treatment modality will be espoused; rather, students will be expected to make use of a combination
of techniques and integrate various forms of intervention. Moreover, diversity, psychological development, technology and professionalism will be integrated throughout the course. (Formerly CNGC 536)

**CNMH 540 Substance Abuse and Dependency (1.5 credits)**
This course is an overview of substance abuse and dependency, including etiological and treatment models, current *Diagnostic and Statistical Manual of Mental Disorders* (DSM) diagnostic criteria and differential diagnosis according to the current DSM. Also included are discussions of evidence based treatments and basic strategies for evaluating counseling outcomes in addiction counseling.

**CNMH 564 Theories of Psychological Development (3 credits)**
*Prerequisite: CNGC 528*
This course will examine traditional and contemporary theories of psychological development. Each theory will be examined from a multicultural perspective. Students who intend to work in mental health, or PreK-12 settings, and who may also be seeking licensure as either an LMHC, School Social Worker/School Adjustment Counselor or School Counselor, will learn how to apply psychological theories of development in assessing client issues and formulate appropriate interventions.

**CNMH 568 Psychopathology (3 credits)**
*Prerequisite: CNGC 528*
This course will provide an examination of the classification system, diagnostic criteria, and differential diagnosis according to the current *Diagnostic and Statistical Manual of Mental Disorders* (DSM). Attention will be given to issues of diversity, etiology and treatment options.

**CNMH 570 Advanced Applied Counseling: Mental Health Counselor (3 credits)**
*Prerequisite: CNGC 520, which may be taken concurrently (for students admitted after 5/1/06); and CNGC 528 and CNGC 529 and CNMH 534 and CNMH 535 and CNMH 568; and a practicum application approved by the director of fieldwork*
This course will include a minimum of 100 hours of field experience and is designed to provide the advanced counseling student who intends to work in mental health or PreK-12 settings and who is seeking licensure as a LMHC or school social worker/school adjustment counselor, with an opportunity to further examine and effectively apply counseling theory into practice and demonstrate this ability during the required practicum experience. Students will actively work with clients in the role of mental health counselor. Emphasis will be placed upon the application of counseling techniques to clients over the lifespan and the further refinement of the counseling student's individual counseling style and increased self-awareness. Maximum use of clinical supervision, audio/video tape, role-play and observation will be made. Moreover, overarching issues such as multiculturalism, psychological development, technology, context and ethics/professionalism will be integrated throughout this course. Students must submit an internship application by the first week of April for summer and fall semesters or by November for spring semester.

**CNMH 571 Internship: Mental Health Counselor (3-12 credits)**
*Prerequisite: CNGC 538; and CNGC 563, which may be taken concurrently; and CNMH 536, which may be taken concurrently; and CNMH 540, which may be taken concurrently; and CNMH 570 or CNMH 580; and a fieldwork application approved by the director of fieldwork*
This variable-credit fieldwork experience is for the advanced counseling graduate student seeking a license as a Licensed Mental Health Counselor in Massachusetts (LMHC) and/or a School Social Worker/School Adjustment Counselor. Students seeking licensure as a Licensed Mental Health Counselor (LMHC) must complete a minimum of 900 hours of fieldwork at a mental health site. Students pursuing an LMHC and a license as a School Social Worker/School Adjustment Counselor must complete a minimum of 450 hours of fieldwork at a mental health site and 450 hours at a school-based mental health site. Students may work 10-40 hours per 15-week semester and will register for three credits for each 150 hours of fieldwork they will complete that semester. For example, 10 hours per week/150 total hours = three credits; 20 hours per week/300 total hours = six credits; 30 hours per week/450 total hours = nine credits; 40 hours per week/600 total hours = 12 credits. The 40 hours per week/600 total hours/12-credit semester option is not available when interning at an educational site. Students must attend a clinical seminar each semester they are involved in field experience and must attend a minimum of two seminars. Students must submit an application by the first week of April for the summer and fall semesters or by November for the spring semester. All fieldwork sites must conform to the current licensing regulations including having an approved on-site supervisor as defined by the Board of Registration of Allied Mental Health Professionals for a Licensed Mental Health Counselor (see 262 CMR). This experience may be repeated up to five times for a maximum total of 18 credits.

**CNMH 580 Advanced Applied Counseling: Mental Health Counselor - Dual License (3 credits)**
*Prerequisite: CNGC 520, which may be taken concurrently (for students admitted after 5/1/06); and CNGC 528 and CNGC 529 and CNMH 534 and CNMH 535 and CNMH 568; and a practicum application approved by the director of fieldwork*
This course will include a minimum of 100 hours of field experience and is designed to provide the advanced counseling student who intends to work in mental health or Pre-K-12 settings, and who is seeking licensure as a Licensed Mental Health Counselor (LMHC) or School Social Worker/School Adjustment Counselor, with an opportunity to further examine and effectively apply counseling theory into practice and demonstrate this ability during the required practicum experience. Students will actively work with clients in the role of mental health counselor in an educational setting. Emphasis will be placed upon the application of counseling techniques to clients and the further refinement of the counseling student’s individual counseling style and increased self-awareness. Maximum use of clinical supervision, audio/video tape, role play and observation will be made. Moreover, overarching issues such as multiculturalism, psychological
development, technology, context and ethics/professionalism will be integrated throughout this course. Students must submit an internship
application by the first week of April for summer and fall semesters or by November for spring semester.

**CNMH 582 Internship: Mental Health Counselor - Dual License (3-9 credits)**
Prerequisite: CNMH 536, which may be taken concurrently; and CNGC 538; and CNGC 563, which may be taken concurrently; and CNMH 540, which may be taken concurrently; and CNMH 570 or CNMH 580; and a fieldwork application approved by the director of fieldwork
This variable-credit fieldwork experience is for the advanced counseling graduate student who is seeking a license as a Licensed Mental Health Counselor in Massachusetts (LMHC) and a School Social Worker/School Adjustment Counselor. Students pursuing dual licensure must complete a minimum of 450 hours of fieldwork at a mental health site and 450 hours at a school-based mental health site. Students may work 10-30 hours per 15-week semester and will register for three credits for each 150 hours of fieldwork they will complete that semester. For example, 10 hours per week/150 total hours = three credits; 20 hours per week/300 total hours = six credits; 30 hours per week/450 total hours = nine credits. Students must attend a clinical seminar each semester they are involved in field experience and must attend a minimum of two seminars over their 900 total hours/18 credits of fieldwork experience. Students must submit an application by the first week of April for the summer and fall semesters or by November for the spring semester. All fieldwork sites must conform to the current licensing regulations including having an approved on-site supervisor as defined by both the Board of Registration of Allied Mental Health Professionals for a Licensed Mental Health Counselor (see 262 CMR) and the Massachusetts Department of Elementary and Secondary Education for a School Social Worker/School Adjustment Counselor. This experience may be repeated up to two times for a maximum total of nine credits.

**CNMH 671 CAGS Internship: Mental Health Counselor (3-9 credits)**
Prerequisite: CNMH 536, which may be taken concurrently; and CNGC 538; and CNGC 563, which may be taken concurrently; and CNMH 540, which may be taken concurrently; and CNMH 570; and a fieldwork application approved by the director of fieldwork
This variable-credit fieldwork experience is for the advanced CAGS in Mental Health Counseling student seeking a license as a Licensed Mental Health Counselor in Massachusetts (LMHC). Students may work 10-30 hours per 15-week semester and will register for three credits for each 150 hours of fieldwork they will complete that semester. For example, 10 hours per week/150 total hours = three credits. Students must attend a clinical seminar each semester they are involved in field experience and must attend a minimum total of two seminars. Students must submit an application by the first week of April for the fall semester internship or by November for the spring semester internship. All fieldwork sites must conform to the current licensing regulations including having an approved on-site supervisor as defined by the Board of Registration of Allied Mental Health Professionals for a Licensed Mental Health Counselor (see 262 CMR). This experience may be repeated up to three times for a total of 12 credits.

**Counseling - Mental Health: Other Approved Courses**

**CNMH 572 Internship II: Mental Health Counselor (6 credits)**
Prerequisite: Successful completion of CNMH 571 and a fieldwork application approved by the Counseling Programs Committee
This third level fieldwork experience is for the advanced counseling intern seeking a license as a Mental Health Counselor (LMHC) in Massachusetts. Students must complete a minimum of 300 hours of fieldwork at an approved mental health fieldwork site.

**CNMH 573 Internship III: Mental Health Counselor (6 credits)**
Prerequisite: Successful completion of CNMH 572 and a fieldwork application approved by the Counseling Programs Committee
This third level fieldwork experience is for the advanced counseling intern seeking a license as a Mental Health Counselor (LMHC) in Massachusetts. Students must complete a minimum of 300 hours of fieldwork at an approved mental health fieldwork site.

**CNMH 583 Internship III: Mental Health Counselor School Based**
**CNMH 672 - Internship II: Mental Health Counselor**

### COUNSELING - SCHOOL

**CNSC 515 Ethical and Legal Issues for the School Counselor (3 credits)**
This course will provide school counselors with a comprehensive examination of pertinent ethical issues and laws. A brief overview of the judicial system covering federal, state, and district policies will be covered as it pertains to school counselors. Course topics will include individual and institutional rights and responsibilities, communication privileges, malpractice liability, Americans with Disabilities Act, due process, IDEA, FERPA, 504, standards of practice, and ethical codes of the American School Counselor Association and the American Counselor Association. (Formerly CNSG 515)

**CNSC 516 Foundations in School Counseling (3 credits)**
CNSC 523  The School Counselor: Psychological Development and Clinical Issues (3 credits)
Prerequisite: CNGC 528, which may be taken concurrently; and matriculation in the MEd or CAGS or postmaster's program in counseling; or consent of instructor
This course is an examination of child and adolescent psychological development as well as the clinical issues encountered in today's school settings. In this course, students will examine psychological theories of development, developmental issues and crises, and learn a basic understanding of the DSM classification system and symptoms of psychopathology specific to the delivery of services as delineated in the ASCA and MASCA Models. (Formerly CNSG 523)

CNSC 524  Applied School Counseling (3 credits)
Prerequisite: CNGC 528, which may be taken concurrently; and CNSC 516, which may be taken concurrently
This course is designed to teach basic counseling and delivery skills to the School Counselor working in K-12 educational settings. Students will utilize a developmental framework to employ counseling skills in the delivery of guidance curriculums, individual planning, responsive services and system support. Students will continue to learn how to integrate professional ethics, legal standards, technology, developmental theories and multicultural competencies in the practice of school counseling. (Formerly CNSG 524)

CNSC 526  Consultation and Collaboration for School Counselors (3 credits)
This course is intended to provide students with an understanding of the theory and practice of consultation specific to school counselors within the K-12 school settings. This course will provide students with a framework for implementing consultation and collaboration models, as well as understanding the facilitation factors necessary in any type of school consultation. Consultation theory, consultation/collaboration methods and current research regarding the delivery of indirect (consultation) services will be addressed in the context of working with a variety of constituencies. Students will learn how to use consultation and collaboration models to assist school counselors when working with individual, group, and programmatic assessment of growth, and developing intervention strategies as part of the ASCA delivery systems in the schools. (Formerly CNSG 526)

CNSC 560  Special Topics in School Counseling (1-3 credits)
This variable-credit course provides students with an opportunity for in-depth exploration of a current topic in school counseling. Relevant theory will be discussed, as well as concerns related to multiculturalism and diversity, technology and ethical issues. This course may be repeated for different topics. (Formerly CNSG 560)

CNSC 563  Internship: School Counselor (5-12) (3-9 credits)
Prerequisite: CNGC 538 and CNSC 523 and CNSC 580 and an internship application approved by the director of fieldwork
This variable credit fieldwork experience is for students who are employed in the role of a 5-12 school counselor. Students pursuing a license as a school counselor must complete a minimum of 600 hours of fieldwork over at least two semesters at an educational site. Students may work 10-30 hours per 15 week semester and will register for three credits for each 150 hours of fieldwork they will complete that semester. For example, 10 hours per week/150 total hours = three credits; 20 hours per week/300 total hours = six credits; 30 hours per week/450 total hours = nine credits. Students must attend a clinical seminar each semester they are involved in field experience. Students must submit an application by April for the fall semester internship or by November for the spring semester internship. This experience may be repeated up to four times for a total of 12 credits. (Formerly CNSG 563)

CNSC 570  Advanced Applied Counseling – School Counselor: (PreK-8) (3 credits)
Prerequisite: MEd candidates: CNSC 520, which may be taken concurrently; CNSC 528 and CNSC 529 and CNSC 516 and CNSC 524; and a practicum application approved by the director of fieldwork. Postmaster's candidates: successful completion of all required postmaster's courses; and a fieldwork application approved by the director of fieldwork and consent of department
This course will include a minimum of 100 hours of field experience at an elementary or middle school setting and is designed to provide the advanced counseling student with an opportunity to further examine and effectively apply counseling theory to practice and demonstrate this ability during the practicum experience. Students will actively work with clients in the role of counselor under the direct supervision of a professional counselor at an approved site. Emphasis will be placed upon the application of counseling techniques to the pre-adolescent population and the further refinement of a student's personal counseling style and self-awareness. Maximum use of clinical supervision, audio/video tape, role-play and observation will be made. Moreover, overarching issues such as multiculturalism, psychological development, technology and context will be integrated throughout this course. (Formerly CNSG 570)
CNSC 571 Practicum: School Counselor (PreK-8) (3-9 credits)
Prerequisite: CNGC 538 and CNSC 515 and CNSC 523 and CNSC 526 and CNSC 570; and a practicum application approved by the director of fieldwork
This variable credit fieldwork experience is for the advanced master's counseling graduate student who is seeking a license as a school counselor (PreK-8) in Massachusetts. Students pursuing a license as a school counselor must complete a minimum of 600 hours of fieldwork over at least two semesters and at most four semesters at an educational site. Students will register for three credits for each 150 hours of fieldwork they will complete that semester. While completing fieldwork hours, students must attend the accompanying fieldwork seminar class in conjunction with completing their fieldwork hours. The seminar meetings will serve to provide group supervision as well as integrate knowledge and assist with application of theory to practice. Students must submit a completed fieldwork application; see counselor education student handbook. This experience may be repeated for a total of 12 credits. (Formerly CNSG 571)

CNSC 580 Advanced Applied Counseling – School Counselor: (5-12) (3 credits)
Prerequisite: MEd candidates: CNGC 520, which may be taken concurrently; CNGC 528 and CNGC 529 and CNSC 516 and CNSC 524; and a pre-practicum application approved by the director of fieldwork. Postmaster's candidates: successful completion of all required postmaster's courses; and a fieldwork application approved by the director of fieldwork and consent of the department
This course will include a minimum of 100 hours of field experience at a middle school or high school setting and is designed to provide the advanced counseling student with an opportunity to further examine and effectively apply counseling theory to practice and demonstrate this ability during the required pre-practicum experience. Students will actively work with clients in the role of counselor under the direct supervision of a professional counselor at an approved site. Emphasis will be placed upon the application of counseling techniques to the adolescent population and the further refinement of a student's personal counseling style and self-awareness. Maximum use of clinical supervision, audio/video tape, role-play and observation will be made. Moreover, overarching issues such as multiculturalism, psychological development, technology and context, will be integrated throughout this course. (Formerly CNSG 580)

CNSC 581 Practicum: School Counselor (5-12) (3-9 credits)
Prerequisite: CNGC 538 and CNSC 515 and CNSC 523 and CNSC 526 and CNSC 580; and a practicum application approved by the director of fieldwork
This variable credit fieldwork experience is for the advanced master's counseling graduate student who is seeking a license as a school counselor (5-12) in Massachusetts. Students pursuing a license as a school counselor must complete a minimum of 600 hours of fieldwork over at least two semesters and at most four semesters at an educational site. Students will register for three credits for each 150 hours of fieldwork they will complete that semester. While completing fieldwork hours, students must attend the accompanying fieldwork seminar class in conjunction with completing their fieldwork hours. The seminar meetings will serve to provide group supervision as well as integrate knowledge and assist with application of theory to practice. Students must submit a completed fieldwork application; see counselor education student handbook. This experience may be repeated for a total of 12 credits. (Formerly CNSC 581)

CNSC 581 Practicum in School Counseling for Postmaster's (PreK-8) (3-9 credits)
Prerequisite: CNSC 580 and a practicum application approved by the director of fieldwork and training
This variable credit fieldwork experience is for the advanced post-master's counseling graduate student who is seeking a license as a school counselor (PreK-8) in Massachusetts. Students pursuing a license as a school counselor must complete a minimum of 450 hours of fieldwork over at least one semester and at most three semesters at an educational site. Students will register for three credits for each 150 hours of fieldwork they will complete that semester. While completing fieldwork hours, students must attend the accompanying fieldwork seminar class in conjunction with completing their fieldwork hours. The seminar meetings will serve to provide group supervision as well as integrate knowledge and assist with application of theory to practice. Students must submit a completed fieldwork application; see counselor education student handbook. This experience may be repeated for a total of nine credits.

CNSC 581 Practicum in School Counseling for Postmaster's (5-12) (3-9 credits)
Prerequisite: CNSC 570 and a practicum application approved by the director of fieldwork and training
This variable credit fieldwork experience is for the advanced post-master's counseling graduate student who is seeking a license as a school counselor (5-12) in Massachusetts. Students pursuing a license as a school counselor must complete a minimum of 450 hours of fieldwork over at least one semester and at most three semesters at an educational site. Students will register for three credits for each 150 hours of fieldwork they will complete that semester. While completing fieldwork hours, students must attend the accompanying fieldwork seminar class in conjunction with completing their fieldwork hours. The seminar meetings will serve to provide group supervision as well as integrate knowledge and assist with application of theory to practice. Students must submit a completed fieldwork application; see counselor education student handbook. This experience may be repeated for a total of nine credits.

Counseling - School: Other Approved Courses

CNSC 561 Internship: School Counselor (PreK-8)
CNSC 562 Internship II: School Guidance Counselor (PreK-8)
CNSC 564 Internship II: School Guidance Counselor (5-12)
CNSA 510  Student Development Theory in Higher Education (3 credits)
This course is an introduction to student development theory and related developmental issues encountered by students in higher education settings. This course will cover developmental issues, such as racial, sexual, gender, cognitive, ethical and emotional identity development. Students will learn how to apply developmental theories to direct student affairs practice. Basic concepts, philosophies and current models, practices and issues in the field will be studied. (Formerly CNSA 551)

CNSA 515  Foundations in Higher Education Counseling for Student Affairs Practice (3 credits)
This course is designed to provide students with an overview of the student affairs profession, its historical foundations, and its roles and functions. The course will address the college and university settings where the profession is practiced, as well as the skills and competencies needed by practitioners to address student development issues. The course will explore the relationship between academic and student affairs and the importance of applying student development theory to practical applications with college students. Students will be exposed to current issues regarding student affairs in higher education. Topics covered in the course include (but are not limited to) institutional mission, organization and administrative models in higher education, training and supervision of staff, program planning and ethical and legal issues in higher education, fiscal and budget management, and good practice in student affairs. (Formerly CNSA 523)

CNSA 520  Ethical, Legal and Professional Issues in Student Affairs (3 credits)
This course is designed to provide students with an in-depth exploration of ethical, legal and professional issues relating to student affairs practice, including but not limited to confidentiality, student privacy, contracts, technology/the Internet, boundaries and dual/multiple relationships, record keeping, supervision of paraprofessional undergraduate/graduate student staff, mental health issues of college students and professional practice in student affairs. Students will acquire knowledge on ethical refection and the core ethical principles in student affairs practice. Students will also learn models that infuse multicultural and diversity issues throughout the ethical decision-making process. Students will gain awareness on how legal issues impact student affairs practice and policy development. Students will learn how to manage organizations and structures within student affairs and higher education, and foster collaborative approaches with key campus constituents and administrators.

CNSA 525  Student Affairs Administration (3 credits)
This course is designed to provide students with an overview of student affairs and higher education administration practice. The course will address the various administrative functions for student affairs administrators, such as fiscal and budget management, organizational development, supervision, training, and evaluation of graduate and paraprofessional staff, program planning, needs assessment, fostering partnerships between academic and student affairs, and ways to integrate student development theory into administration policy and development. Students will discuss ways that administrative decision-making impacts student well-being and campus environments and how policies and procedures are created.

**CNSA 530  Applied Counseling for Student Affairs Professionals (3 credits)**

This course is designed to acquaint students with the counseling skills, interventions and techniques that are used within a student affairs setting. Through lectures, discussions, role-plays, demonstrations and videotaped vignettes, students will develop the skills and the conceptual frameworks that are necessary for effective counseling with college students. Students will learn basic crisis intervention strategies in order to effectively respond to a variety of mental health-related issues on campus. Students will discuss appropriate referral procedures and ways to foster critical collaborative relationships with institutional and community resources. Professional ethics, legal standards, technology, developmental theories and multicultural competencies will be integrated within the practice of counseling in a student affairs capacity.

**CNSA 560  Special Topics in Student Affairs (1-3 credits)**

This variable credit course provides students with an opportunity for in-depth exploration of a current topic in student affairs. Relevant theory will be discussed, as well as concerns related to multiculturalism and diversity, technology and ethical issues. Students may take this special topics course numerous times with permission of the program director or course instructor.

**CNSA 570  Advanced Applied Counseling: Student Affairs Counseling (3 credits)**

Prerequisite: CNGC 520 and CNGC 528 and CNGC 529 and CNMH 535 or CNSA 530 (only CNSA 530 if admitted after 5/1/06); and CNSA 523 and CNSA 510 and a practicum application approved by the Director of Fieldwork and Training

This course includes a minimum of 150 hours of field experience and is designed to provide the advanced student affairs counseling student with an opportunity to further examine and effectively apply counseling and student development theory to practice, and demonstrate this ability during the required practicum experience. Students will actively work with college students/clients in the role of counselor under the direct supervision of a student affairs professional counselor at an approved site. Emphasis will be placed upon the application of counseling techniques to the adolescent/adult population and the further refinement of a student's individual counseling style and self-awareness. Maximum use of clinical supervision, audio/video tape, role play and observation will be made. Moreover, overarching issues such as multiculturalism, psychological development, student development, technology and context will be integrated throughout this course. (*Formerly CNHE 570*)

**CNSA 571  Internship: Student Affairs Counselor (3-12 credits)**

Prerequisite: CNGC 529 and CNGC 538 and CNSA 520 and CNSA 570, and an internship application approved by the Director of Fieldwork and Training

This variable credit fieldwork experience is for the Student Affairs student seeking experience in various higher education settings. Students must complete a minimum total of 600 hours at an approved higher education site. Students may work 10-40 hours per 15-week semester and will register for three credits for each 150 hours of fieldwork they will complete that semester. For example, 10 hours per week/150 total hours = three credits; 20 hours per week/300 total hours = six credits; 30 hours per week/450 total hours = nine credits; 40 hours per week/600 total hours = 12 credits. The 40 hours per week/600 total hours/12-credit semester option is only available if the student is interning at a minimum of two different functional student affairs settings/departments. Students must submit an application by April for the fall semester or by November for the spring semester. (*Formerly CNHE 572*)

**Counseling - Student Affairs: Other Approved Courses**

**CNSA 572  Internship II: Student Affairs Counselor**

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**CRIMINAL JUSTICE**

**CRJU 199  First Year Seminar (3 credits)**

Prerequisite: Open to all freshmen with a writing placement score of 3 or above or a SAT score of 500 or above or who have completed ENGL 101. Students with 24 or more transfer credits will have this requirement waived.

First Year Seminars (FYS) are writing-intensive, topic courses that introduce students to academic thought, discourse and practices. FYS courses prepare and orient students toward productive and fulfilling college careers by actively engaging them in a specific academic area of interest. Students will improve their writing, reading, research and basic information and technology skills while learning to work both collaboratively and independently. These courses will fulfill the First Year Seminar requirement and may fulfill other requirements for the
core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one FYS course may be taken for credit. (CFYS)

**CRJU 201 Introduction to Criminal Justice (3 credits)**
This course provides an overview of the American criminal justice system, including the development and structure of the system. It surveys the roles and relationships among the key actors in the system, including police, courts, juries, prosecutors and corrections agencies and institutions. The course also examines the relations between society, crime and the criminal justice system. Offered both semesters.

**CRJU 202 Introduction to Crime Theory (3 credits)**
This course provides an overview of the theoretical frameworks for explaining criminal behavior. Each of the major criminological paradigms – biological, psychological, environmental, social, political, economic and integrated theories – will be discussed. The historical, political and social context in which these theories emerged and the policy implications of the theories will also be presented. The class will focus on each theory’s major tenets, its social context, and critiques of its assumptions and reasoning.

**CRJU 203 The Juvenile Justice System (3 credits)**
Prerequisite: CRJU 201 and CRJU 202, both may be taken concurrently
The primary focus of this course is to understand the purpose, organization and function of the juvenile justice system. This course also examines the evolution of the juvenile justice system -- its philosophy, aims, objectives and dilemmas.

**CRJU 227 Deviance and Social Control (3 credits)**
Cross Listed with SOCI 227
Prerequisite: SOCI 102 and CRJU 201; or consent of instructor
This course examines deviant acts with an eye toward understanding social order and change. Topics covered include the types and causes of deviance, the social conditions and elements of deviant acts, and the effects of deviance and mechanisms for prevention, punishing and rehabilitating deviant individuals and groups. (Formerly CRJU/SOCI 327)

**CRJU 241 Women and Violence (3 credits)**
Prerequisite: CRJU 201 or consent of instructor
Within a global perspective that recognizes the myriad and diverse experiences of women, this course examines the continuum of violence that affects women’s lives, as victims and/or perpetrators. Framed by cross-cultural analyses of trends and patterns, students investigate how historical, socio-political and economic conditions shape the way women experience and respond to domination and exploitation. Specifically, the course examines violence against women that is differently racialized, class- based and gendered, as well as how such acts of violence and violation shape a woman’s sense of identity. Topics include sexual violence, intimate partner violence, media portrayal of violence against women, women street crime offenders and women in prison. (CMCL; CSOC; CWRT)

**CRJU 255 Juvenile Delinquency (3 credits)**
Cross Listed with SOCI 255
Prerequisite: SOCI 102 or CRJU 201; or consent of instructor
This course includes the analysis of the nature and types of juvenile behavior that violates law; the mechanisms of defining such behavior as delinquent; and the relationship between delinquency and the social situations of juvenile offenders. Offered fall semester. (Formerly CRJU/SOCI 355)

**CRJU 271 Crime Victims and the Political Process (3 credits)**
The goal of this course is to expand and evaluate students' knowledge of how crime victims influence criminal justice policy. Students will gain knowledge by exploring if, how and when crime victims affect legislators' view on crime. The course examines the media's role in promoting a victim's view and the impact on crime policy. The role of victims' rights groups and their political goals, methods and efficacy will also be examined. The role of race, class and gender in crime victims' access to legislators and media outlets will also be discussed. Students will complete the course with a critical and analytical view of the growing and unchallenged influence of crime victims in policymaking.

**CRJU 298 Second Year Seminar (Speaking Intensive) (3 credits)**
Prerequisite: _ _ _ _ 199; Open to all sophomores and juniors who have completed ENGL 101, and the speaking skills requirement.
Students with 54 or more transfer credits will have this requirement waived. Cannot be taken if _ _ _ _ 299 is taken for credit.
Second Year Seminars (SYS) are speaking- intensive, topic courses that build on the academic skills and habits introduced in the First Year Seminar. SYS courses engage students in a specific academic area of interest and provide them with the opportunity to reinforce, share and interpret knowledge. Students will improve their speaking, reading, research and basic information and technology skills while building the connections between scholarship and action that are required for lifelong learning. These courses will fulfill the Second Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one SYS course may be taken for credit. (CSYS)
CRJU 299 Second Year Seminar (Writing Intensive) (3 credits)
Prerequisite: _ _ _ _ 199; Open to all sophomores and juniors who have completed ENGL 101 and ENGL 102. Students with 54 or more transfer credits will have this requirement waived. Cannot be taken if _ _ _ _ 298 is taken for credit.
Second Year Seminars (SYS) are writing-intensive, topic courses that build on the academic skills and habits introduced in the First Year Seminar. SYS courses engage students in a specific academic area of interest and provide them with the opportunity to reinforce, share and interpret knowledge. Students will improve their writing, reading, research and basic information and technology skills while building the connections between scholarship and action that are required for lifelong learning. These courses will fulfill the Second Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one SYS course may be taken for credit. (CSYS)

CRJU 323 Comparative Legal Systems in a Global Context (3 credits)
Prerequisite: CRJU 201
This course provides students with an understanding of the fundamental principles and practices of non-U.S. legal systems. The course will assess historical legacies, along with origins of law and the development of key legal institutions. The intent is to foster greater comprehension of different legal systems in an interdependent world. The course will begin by examining legal systems with Western qualities, followed by an examination of legal systems not constructed on Western suppositions. Comparisons will be cross-national, and will be informed by increased knowledge of non-U.S. legal systems. Offered alternate years, fall semester. (CGCL)

CRJU 324 Law, Justice and Society (3 credits)
Prerequisite: CRJU 201
This course explores the relationship between the social forces (economic, demographic, political, religious and technological) that shape legal systems, and the way that legal systems, in turn, shape social reality. Historical and contemporary interdisciplinary theories will be examined as to their usefulness in understanding the relationships between law, justice and society. Particular attention will be given to issues of social control, legitimacy, deviance, justice, the workings of the legal profession and how public truth is constructed. Offered alternate years, spring semester.

CRJU 325 Political Theory and the Justice System (3 credits)
Prerequisite: CRJU 201
This course focuses on the dynamics of political forces and the role they play in the management of crime and justice in the United States. Political theories and perspectives are examined, compared, and contrasted within the context of justice system practices, policies and outcomes. Offered alternate years.

CRJU 331 Police, Community and Society (3 credits)
Prerequisite: CRJU 201
This course examines the current issues and themes relating to the police and their role in communities and in society. Topics covered will include the organizational structure of police departments, police problems and issues affecting society at large, new theories of the effects of policing on crime, and the effectiveness of community policing. Offered both semesters.

CRJU 332 History of Policing in America (3 credits)
Prerequisite: CRJU 331 or consent of instructor
This course examines the historical development of policing in the United States and the relationship between past police practices and their modern counterparts (e.g., organization structures, police subculture issues and police-community relations). By examining the history of policing and how it functioned, students will develop a more informed perspective regarding this vital component of the criminal justice system. Offered alternate years.

CRJU 334 White Collar Crime (3 credits)
Cross Listed with SOCI 334
Prerequisite: SOCI 102 and SOCI 290; or CRJU 201; or consent of instructor
Broadening the definition of crime, this course will study the behavioral systems involved in the commission of white collar crimes in complex structures, such as government bureaucracies, multi-national corporations and underground systems. The modern institutional factors -- political and social -- permitting or restricting the commission of such crimes will be investigated. Specifically, the performance of the criminal justice system will be examined. Offered spring semester.

CRJU 335 Criminal Law and the Courts (3 credits)
Prerequisite: CRJU 201
This course examines the development of American criminal law and the criminal court system. The purposes, structure, functions and effects of the legal system will be studied. Key principles for determining criminal liability and limits of liability, by means of justification and excuse, are studied. Among the crimes to be addressed are homicide, sexual assault, drugs and crimes against property, public order and morals. The course will also examine the roles of central actors and the decision-making process in criminal courts. It also explores the impact of social inequality on the structure and operation of criminal courts and considers prospects for reforming criminal courts.
CRJU 339  Violence, Guns and Society (3 credits)
Cross Listed with SOCI 339
Prerequisite: SOCI 102 and SOCI 290; or CRJU 201; or consent of instructor
This course focuses on guns and lethal violence in society. Drawing on both criminal justice and sociological theory and research, it examines the causes and consequences of lethal violence with special attention to the role of firearms. Topics covered include the definitions and causes of violence, the extent to which guns intensify violence, guns and lethal violence, in comparative perspective, the American gun culture, the Second Amendment, the politics of gun control, the legal regulation of guns, the relationships between gun prevalence and gun violence, and the costs of gun violence. Offered every third year.

CRJU 346  Criminal Procedure (3 credits)
Prerequisite: CRJU 201
This course offers a comprehensive view of the historical development of criminal procedure and how it defines standards of liberty for ordinary citizens as well as criminal defendants. In addition, this course focuses on the ideological changes that manifest in court opinion, the implicit, or at times explicit, relationship between politics, partisanship and court behavior. The role of the court as a solver of crime problems is also considered. (CWRT)

CRJU 347  Restorative Justice (3 credits)
Prerequisite: CRJU 201 or consent of instructor
This course explores the philosophy of restorative justice, which includes a global set of indigenous peacemaking practices. Restorative justice emphasizes forgiveness, redemption, offender reintegration through community involvement, offender accountability and victim-offender mediation. (CGCL; CMCL; CSOC; CWRT)

CRJU 350  Behind the Walls: Crime and Justice (3 credits)
Prerequisite: CRJU 201 and consent of instructor
This course is an opportunity for students to exchange ideas and perceptions of crime and justice with an incarcerated population. The topics discussed each semester may vary. Through dialogue and writing assignments, theoretical knowledge and lived experience will be interwoven to gain a deeper understanding of crime and the criminal justice system. This course follows the Inside-Out Prison Exchange Program model of teaching and is taught inside the prison walls. This course may be repeated for a maximum of six credits. Offered either semester.

CRJU 352  Urban Crime (3 credits)
Cross Listed with SOCI 352
Prerequisite: SOCI 102 and SOCI 290; or CRJU 201; or consent of instructor
This course examines urban and neighborhood crime. In addition to surveying theories of urban crime, disorder, and unrest, it examines responses to urban crime, including community policing, order maintenance policing, crime prevention through environmental design, and programs to ameliorate the deeper causes of crime. The course examines the effects of inequality, racial and ethnic discrimination, substance abuse and gun violence on urban crime. Another topic covered is the drop in urban crime rates during the 1990s. Offered alternate years.

CRJU 354  Corrections (3 credits)
Prerequisite: CRJU 201 and CRJU 202
This course is an analysis of the social and organizational structures and processes involved in dealing with individuals who have been designated as offenders of criminal law. The correctional system includes community-based corrections, institutional corrections, and issues of supervision, rehabilitation, aftercare and offender re-entry. (Formerly SOCI 354)

CRJU 358  Race, Class, Crime and Justice (3 credits)
Prerequisite: CRJU 201 and CRJU 202
This course examines the effects of class and race on justice outcomes. Historical and contemporary practices of the system are evaluated for disparate or discriminatory patterns. Offered once yearly. (CMCL)

CRJU 359  Technology and Crime Control (3 credits)
Prerequisite: CRJU 201 and CRJU 202 and six additional credits in criminal justice courses
This course examines how changes in technology create new forms of crime, as well as modes of apprehension, detection and prevention. Additionally, the course will examine the “outsourcing” of surveillance by the states and the federal government to private corporate data miners. Offered alternate years.

CRJU 369  Gender, Crime and Justice (3 credits)
Prerequisite: CRJU 201 and CRJU 202; or consent of instructor
This interdisciplinary course will explore how females experience crime, justice, and the criminal justice system differently than do males. Through a comparative historical lens, we will explore legal, philosophical, psychological, sociological and political perspectives on crime...
and justice. This course will use a gendered perspective in examining the roots of violence against women in our society, specifically addressing femicide, intimate partner violence, and sexual assault. We will then examine the difference between women and men as offenders, including theories of offending, agency and types of offenses committed. Particular emphasis will be given to incarceration alternatives, including restorative justice programs. (CMCL; CSOC; CWRT)

CRJU 371 Sex Crime (3 credits)  
*Prerequisite: CRJU 201*  
This course explores the historical evolution of sex crimes. Topics include the age of consent, prostitution, anti-sodomy laws, stranger rape, date rape and sex-offender registration. The course will also examine the impact of sexual assault on victims and offenders, as well as the criminal justice system’s response and the role of policymakers and advocacy groups in the formulation and enforcement of sex crime laws.

CRJU 372 Terrorism and Civil Liberties (3 credits)  
*Prerequisite: CRJU 201*  
The focus of this course is the ongoing conflict between preventing terrorism and compromising constitutional freedoms. This course will examine the enhanced powers of police agencies and federal prosecutors. Students will survey the effects of these new powers, particularly with regard to changes in due process standards and evidentiary requirements. Students will also be provided with historical examples of previous national security efforts to protect the public.

CRJU 381 Privatization in Criminal Justice (3 credits)  
*Prerequisite: CRJU 201*  
This course will examine the many controversies around the reemergence of private prisons as well as the explosive growth of private police in the United States. *Offered alternate years.*

CRJU 385 Victimology (3 credits)  
*Prerequisite: CRJU 201 and CRJU 202*  
This course involves the study of victimization by drawing on scientific and other literature that analyzes these experiences, impacts and consequences on crime victims, justice system policies and practices, and the law.

CRJU 388 Hate Crime (3 credits)  
*Prerequisite: CRJU 201 and CRJU 410*  
Crime that is committed as a result of bigotry is commonly referred to as hate crime. This course examines the political and social significance of these crime events. In addition, this course reviews theories of prejudice, the role of youth subcultures in the development of the neo-Nazi skinhead movement, typologies of hate groups, motives, hate crime victimology, recruitment strategies of hate groups, hate speech and correctional responses.

CRJU 399 Special Topics in Criminal Justice (3 credits)  
*Prerequisite: Dependent on topic*  
Various special topics of current interest in criminal justice will be offered from time to time. Topics will be announced before registration. May be taken more than once but only three credits will be counted toward the first 30 hours in the criminal justice major.

CRJU 404 Media, Justice and Crime (3 credits)  
*Prerequisite: CRJU 201 and an additional three-credit criminal justice course*  
This course is a survey of how various media institutions (newspapers, magazines, talk radio, network television, cable, film and Internet-based products) and formats (news, entertainment and infotainment) shape the representation and public perception of dangerousness, criminality, police activity and ultimately, the direction of contemporary social policy. *Offered alternate years, spring semester.*

CRJU 406 Ethics and the Criminal Justice System (3 credits)  
*Prerequisite: CRJU 201 and CRJU 202*  
This course examines a wide range of ethical and moral issues in the field of criminal justice. Topics covered include the use of harm to prevent harm, the use of discretionary decision-making, prediction problems and moral dilemmas that confront various justice agents, e.g., police, prosecutors, defense attorneys and correctional officers. Teleological and deontological ethical systems are examined and used to measure the moral worth of practitioner actions in the criminal justice system. *Offered once a year.*

CRJU 410 Applied Crime Theory in Criminal Justice (3 credits)  
*Prerequisite: CRJU 201 and CRJU 202*  
This course utilizes an applied approach in examining theories of crime causation in light of criminal justice aims. The criminal justice
system responds to crime and criminals based on explicit and implicit theories of causation. Recognizing this process, criminal justice majors will learn theory and theory validity of examining criminal justice and related interventions. (CWRM)

CRJU 415  Police Culture (3 credits)
Prerequisite: CRJU 201 and CRJU 202
This course will introduce students to the study of the organizational culture of law enforcement. Specifically, students will encounter a rich, diverse and burgeoning literature on police culture, as they read a number of first-person accounts drawn from ethnographic fieldwork. They will explore vexing and contentious issues such as the misuse of force, official corruption and the militarization of policing in the 21st century.

CRJU 420  Research Methods in Criminal Justice (3 credits)
Prerequisite: CRJU 201 and CRJU 410
This course focuses on the commonly used research methods found in criminal justice. Using crime and justice contexts, topics covered include research design, the relationship between theory and research types of data, analytic techniques and ethical considerations.

CRJU 425  Comparative Crime and Deviance (3 credits)
Prerequisite: CRJU 335 and CRJU 410
This course examines crime, law and deviance in comparative perspective. Among the topics covered will be the logic of comparative research problems of cross-national data, violent crime, economic and political crime, transnational corporate crime, underdevelopment and crime, social control and conflict resolution, and criminal justice and penal policies. The course also focuses on crime in relation to age, gender, race and class. The comparative materials are used to reflect on problems of crime and the criminal justice system in the United States. Offered alternate spring semesters.

CRJU 426  Ethnography and Crime Analysis (3 credits)
Prerequisite: CRJU 201 and CRJU 410
This course examines ethnographic research methodologies as they relate to crime and justice. The culture of particular criminal groups, as well as justice agents, is often unveiled for the first time through the efforts of field researchers. Students will learn how researchers enter the world of their subjects, build trust, process information and report social phenomena. Offered alternate years.

CRJU 427  Alternative Crime Analysis (3 credits)
Prerequisite: CRJU 410, which may be taken concurrently; and CRJU 420; or consent of instructor
This course introduces students to structured real-time observations of the world of crime and criminal interdiction. Students will learn about the theories, practices and potential pitfalls of field research, from design to application and interpretation. Students will be introduced to the six most commonly employed approaches in qualitative research: narrative research, phenomenology, grounded theory, ethnography, case studies and content analysis. As a final project, students will choose one approach and will design a mock study intended to enhance potential future study of crime and the criminal justice system.

CRJU 428  Culture and Crime (3 credits)
Prerequisite: CRJU 201 and CRJU 202
This course examines the impact of what occurs before crimes are ever committed. Students will begin with an exposure to the definitions of culture, its impact on society, and the way(s) in which subcultures shape worldviews and notions of right and wrong. The course will introduce concepts such as resistance, transgression, and seduction as both predictors and explanations of crime within the overarching context of the power relationships experienced by the various cultures co-existing within our society.

CRJU 430  Analyzing Criminal Justice Data (3 credits)
Prerequisite: CRJU 201 and CRJU 410 and CRJU 420
This course teaches principles of statistical techniques as applied within criminal justice. By using criminal justice research problems, this course will cover topics including constructing testable research questions, organizing data, applying appropriate statistical tests and interpreting results. This course also teaches student how to evaluate government data, technical reports and empirical studies which summarize criminal justice data. (CQUR)

CRJU 441  Homicide (3 credits)
Prerequisite: CRJU 201 and CRJU 202 and CRJU 335 and CRJU 410; or consent of instructor
This course explores key theoretical paradigms, as well as current research related to homicide. Situating homicide in the U.S. within global patterns and historical trends, this class investigates the following phenomena: types of homicide, which include femicide (murder of women), intimate partner homicide, serial murder, hate murder, rampage killings, gang murder and terrorism. The course also addresses the characteristics of homicide victims and offenders, along with identifying factors that contribute to variance in homicide levels and specific types of homicide. Finally, beginning with legal definitions of homicide, the course surveys how the criminal justice system responds to homicide.
CRJU 485  Honors Thesis (3 credits)
Prerequisite: Open to Commonwealth and Departmental Honors students and senior status.
Completion of all prior departmental requirements and CRJU 420. The Honors Thesis can only be taken as a two-semester thesis.
Students must enroll in CRJU 485 in a second consecutive semester after having successfully completed the first semester of CRJU 485.
The Departmental Honors Committee will determine if the final version of the thesis qualifies the student to graduate with honors.

CRJU 496  Seminar: Critical Issues in Crime and Justice (3 credits)
Prerequisite: Senior standing and CRJU 201 and CRJU 202 and CRJU 331 and CRJU 335 and CRJU 354 and CRJU 406 and CRJU 410 and CRJU 420; and CRJU 430 which may be taken concurrently. Students must have a minimum of 84 earned hours.
This seminar will examine critical issues related to crime and justice. The focus of the seminar will vary from semester to semester, but it will enable students to synthesize their knowledge and skills in analyzing issues including ethics and criminal justice, racial inequality in the criminal justice system, the efficacy of increasing incarceration rates and societal responses to crime. The seminar will require students to demonstrate: 1) comprehensive knowledge of the field of criminal justice; 2) critical thinking skills applied to criminal justice; 3) effectiveness in oral and written communication; 4) awareness of ethical issues in criminal justice; and 5) knowledge of data sources in criminal justice and the ability to apply criminal justice related information and research.

CRJU 497  Research (3 credits)
Prerequisite: CRJU 201 and CRJU 202 and CRJU 331 and CRJU 335 and CRJU 354 and CRJU 406 and CRJU 410 and CRJU 420; and CRJU 430 which may be taken concurrently; consent of department; formal application required
Students will conduct social research using techniques taught in CRJU 420, writing reports of findings as for publication. Experimental survey and content analysis approaches will be used. This course is primarily for criminal justice majors; others by special arrangement.

CRJU 498  Internship in Criminal Justice (3-15 credits)
Prerequisite: Senior standing and a minimum cumulative GPA of 2.5; consent of the department; formal application required. Students must have a minimum of 84 earned hours.
The internship provides an opportunity for senior criminal justice majors to gain practical expertise in the field by participating in an off-campus work study experience that complements their academic preparation. In addition to working in their internship setting, students will meet regularly with a faculty supervisor. Students may work in an appropriate local, state or federal agency or private organization. Only three credits of internship may count toward the major in criminal justice. This course may be repeated for a maximum of 15 credits. Offered either semester.

CRJU 499  Directed Study in Criminal Justice (1-3 credits)
Prerequisite: Consent of the department; formal application required
Directed study is open to juniors and seniors who have demonstrated critical and analytical abilities in their studies and who wish to pursue a project independently. This course may be taken twice for a maximum of six credits. Offered either semester.

CRJU 500  Foundations of Scholarship (3 credits)
This course provides students with opportunities to better develop the tools needed for scholarly graduate-level research and writing, including critical thinking, analysis and writing. There will be an emphasis on research-based writing, e.g., conducting a literature review, evaluating claims, and planning and drafting papers. This course will also address appropriate documentation and citation methodologies; the utilization of library resources, print and electronic data sources, legal research and computer use. Methods for writing a successful master’s thesis will also be incorporated.

CRJU 501  Structure and Process of the Criminal Justice System (3 credits)
Prerequisite: CRJU 500, which may be taken concurrently
This course examines the organization of the criminal justice system and explores the nature of relationships among its components. The origins of criminal law, law enforcement agencies, federal and state court systems and corrections are reviewed. In addition, the functions and processes of each essential agency within the criminal justice system are investigated. Students completing this course will gain a solid understanding of the evolution of the modern criminal justice system as it developed from its Western European and British roots.

CRJU 502  Research (3 or 6 credits)
Prerequisite: Consent of department; formal application required; and CRJU 500, which may be taken concurrently
Original research is undertaken by the graduate student in their field. For details, consult the paragraph titled “Directed or Independent Study” in the “College of Graduate Studies” section of this catalog. This course may be repeated for a maximum of six credits.

CRJU 503  Directed Study (1-3 credits)
Prerequisite: Consent of department; formal application required and CRJU 500, which may be taken concurrently
Directed study is designed for the graduate student who desires to study selected topics in a specific field. For details, consult the
paragraph titled "Directed or Independent Study" in the "College of Graduate Studies" section of this catalog. This course may be repeated for a maximum of six credits.

CRJU 504  Seminar: Crime, Justice and Society (3 credits)
Prerequisite: CRJU 500, which may be taken concurrently
This seminar introduces students to crime and justice in American society. It provides an overview of central issues in criminal justice and of the five core areas in criminal justice 1) criminal justice and juvenile justice processes, 2) criminology, 3) law enforcement, 4) law adjudication and 5) corrections.

CRJU 505  Applications of Crime Theory (3 credits)
Prerequisite: CRJU 500, which may be taken concurrently
This course utilizes an applied approach in examining fundamental and advanced theories of crime and criminals based on explicit and implicit theories of causation. Recognizing this process, this course focuses on theories and their manifestations of crime and justice programs. Students will learn theory and theory validity by evaluating empirical evidence of program effects.

CRJU 510  Research Methods in Criminal Justice (3 credits)
Prerequisite: CRJU 500
This course provides an overview of the research process and research design in relation to crime and criminal justice. Topics covered include the scientific method, operationalizing variables and indicators, ethics and policy in research and various methods of collecting data. Students will design and carry out a research project.

CRJU 511  Analyzing Criminal Justice Data (3 credits)
Prerequisite: CRJU 500, which may be taken concurrently; and CRJU 510
This course focuses on statistical data analysis in relation to research in crime and criminal justice. Topics covered include the most important data analysis techniques in social and criminal justice research the assumptions underlying various statistical techniques, and how to interpret quantitative data analysis. Students will learn to carry out their own data analysis.

CRJU 512  Ethics and Policy in Criminal Justice (3 credits)
Prerequisite: CRJU 500, which may be taken concurrently; and CRJU 504 and CRJU 505
This course provides an overview and analysis of major ethical and policy issues related to crime and criminal justice. Students will examine various ethical issues including those related to policing, the death penalty and criminal courts and law. The course will also cover criminal justice policy.

CRJU 515  Criminal Justice Administration (3 credits)
Prerequisite: CRJU 500, which may be taken concurrently
This course draws on research in complex organizations to analyze the structure, functions and operations of criminal justice agencies, including the police, courts and corrections. Students will gain an understanding of administration in criminal justice organizations.

CRJU 517  Studies in Crime Prevention: Understanding What Works (3 credits)
Prerequisite: CRJU 500, which may be taken concurrently; and CRJU 504 and CRJU 505; or consent of instructor
This course conducts a comprehensive examination of crime prevention programs in the United States. In addition to the analysis of program features (e.g., assumptions, concepts, process, outcomes, evaluation), students will also review the social and political climates surrounding crime prevention programs. Because these initiatives are wide-ranging and often occur outside of the criminal justice system, students will learn about crime prevention programs based in the following venues: the family, the school, the community, and in job training and placement programs.

CRJU 518  Hate Crimes and Hate Groups (3 credits)
Prerequisite: CRJU 500, which may be taken concurrently; and CRJU 504 and CRJU 505; or consent of instructor
This course examines the etiology of hate crime, its characteristics and the social ecology that nurtures its existence and persistence. In addition to focusing on the crime itself, the course analyzes hate groups, the dynamics of the hate movement as well as the processes of recruitment, affiliation and disaffiliation.

CRJU 520  Violence, Crime and Society (3 credits)
Prerequisite: CRJU 500, which may be taken concurrently
This course provides an overview of violence and crime in society. The course focuses on the causes of violent crime and examines violence from a variety of disciplinary perspectives.

CRJU 521  Domestic Violence (3 credits)
Prerequisite: CRJU 500, which may be taken concurrently
This course provides an overview of the causes of domestic violence and the criminal justice system's response to domestic violence.
Topics covered include psychological, sociological and feminist theories of domestic violence; the nature of domestic violence in a patriarchal society; resources available for victims of domestic violence; and the efficacy of various approaches to reducing domestic violence.

**CRJU 522 Women and Criminal Justice (3 credits)**
*Prerequisite: CRJU 500, which may be taken concurrently*
This course provides an overview of women and the criminal justice system. Topics covered include women as offenders, victims, and criminal justice professionals; theories of women and crime; and the treatment of female offenders by criminal justice agencies.

**CRJU 525 Comparative Crime and Justice (3 credits)**
*Prerequisite: CRJU 500, which may be taken concurrently*
This course examines crime, justice and criminal justice systems in comparative perspective. Topics covered include multinational crime; the relationships between socioeconomic development and crime; and different approaches to law enforcement, criminal procedure and law, juvenile justice and corrections. The course will draw on United Nations criminal justice surveys and other cross-national data sources.

**CRJU 527 Policing in a Democratic Society (3 credits)**
This course provides a comparative overview of the development of police forces, the organization of the police in various societies and the nature of policing in industrial societies.

**CRJU 530 Introduction to Police Culture: An Intensive Review (3 credits)**
*Prerequisite: CRJU 500, which may be taken concurrently; and CRJU 504 and CRJU 505*
This course introduces students to the in-depth study of the organizational culture of law enforcement. Specifically, students will delve into a rich, diverse and burgeoning literature on police culture, as they read a number of first-person accounts and weigh relevant theoretical constructs drawn from ethnographic fieldwork. They will explore contentious issues, such as the misuse of force, official corruption and the militarization of policing in 21st century America, with an emphasis on the intensive use of scholarly research and monographs.

**CRJU 540 Corrections, Crime and Society (3 credits)**
*Prerequisite: CRJU 500, which may be taken concurrently*
This course provides an overview of the relations between crime and corrections. Topics covered include the theories of punishment, the development of corrections, theories of corrections and rehabilitation, and current issues in American corrections.

**CRJU 541 Community-Based Corrections (3 credits)**
*Prerequisite: CRJU 500*
This course focuses on recent developments in community-based corrections. Topics covered include the history of alternatives to prisons, the relationships between community-based corrections and rehabilitation, and the political feasibility of community-based corrections. The course also examines other intermediate sanctions, such as alternative sentencing and diversion programs.

**CRJU 542 Research Seminar in Corrections (3 credits)**
*Prerequisite: CRJU 500, which may be taken concurrently; and CRJU 510 and CRJU 511*
In this seminar students will choose a research topic related to corrections, plan and carry out their research. During weekly class meetings, the class members will discuss their projects and present their results.

**CRJU 546 Class, Race, Gender and Crime (3 credits)**
*Prerequisite: CRJU 500, which may be taken concurrently*
This course examines how class, race and gender intersect with crime and the criminal justice system. The course provides an overview of class, race, ethnic and gender stratification in the United States and looks at how that stratification is reflected in judgments about crime and in treatments of various groups in the criminal justice system.

**CRJU 550 Juvenile Justice and Society (3 credits)**
*Prerequisite: CRJU 500, which may be taken concurrently*
This course provides an overview of juvenile delinquency and the juvenile justice system. It covers various theories of juvenile delinquency and examines their relations to broader sociological and criminological theories. Other topics include the development of the juvenile justice system, the police handling of juveniles, the role of juvenile courts, and juvenile corrections and rehabilitation.

**CRJU 551 Law and Society (3 credits)**
*Prerequisite: CRJU 500, which may be taken concurrently*
This course provides an overview of the sociology of law. Topics covered include the sources and development of law, different philosophical and sociological approaches to law, the roles of criminal justice agencies, alternate dispute resolution, the relations of between law and social change, and the impact of race, class and gender in the legal system. The course will also examine attempts to develop a general theory of law and society.
CRJU 597 Research Seminar in Criminal Justice (3 credits)
Prerequisite: CRJU 500, which may be taken concurrently; and CRJU 510 and CRJU 511
In this seminar students will choose a research topic, plan and carry out their research. During weekly class meetings, the class members will discuss their projects and present their results. This course may be repeated twice for different topics.

CRJU 598 Internship in Criminal Justice (3 credits)
Internships provide students with experience in a criminal justice setting and give them the opportunity to apply what they have learned in their classes.

CRJU 599 Special Topics in Criminal Justice (3 credits)
Prerequisite: CRJU 500, which may be taken concurrently
This course will focus on specific topics in criminal justice. The topics will differ from semester to semester.

Criminal Justice: Other Approved Courses
CRJU 333 Resolving Conflict
CRJU 555 Information Technology for Criminal Justice
CRJU 557 Advanced Research Methods in Criminal Justice

DANCE
DANC 146 Dance Appreciation (3 credits)
This course is designed to explore the basic components of dance and to enable students to appreciate the art of dance as an informed audience and as participants in its rich variety. (Formerly PHED/THEA 146) (CFPA)

DANC 155 Dance Practicum (1 credit)
In this class students will choreograph and rehearse dances for a concert performance. Concurrent enrollment in a dance class is strongly advised. This course may be repeated. Graded on a (P) Pass/(N) No Pass basis. Fall semester is open to all; spring semester is open by audition. (Formerly PHED/THEA 155)

DANC 199 First Year Seminar (3 credits)
Prerequisite: Open to all freshmen with a writing placement score of 3 or above or a SAT score of 500 or above or who have completed ENGL 101. Students with 24 or more transfer credits will have this requirement waived.
First Year Seminars (FYS) are writing intensive, topic courses that introduce students to academic thought, discourse and practices. FYS courses prepare and orient students toward productive and fulfilling college careers by actively engaging them in a specific academic area of interest. Students will improve their writing, reading, research and basic information and technology skills while learning to work both collaboratively and independently. These courses will fulfill the First Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one FYS course may be taken for credit. (CFYS)

DANC 255 Creative Dance I (3 credits)
This course investigates the theory of dance through participation, composition, lecture, discussion and film. Students learn about the elements of space, time, force, movement and style. (Formerly PHED/THEA 255) (CFPA)

DANC 256 Creative Dance II (3 credits)
Prerequisite: DANC 255
The use of basic elements of dance to form a set movement composition will be taught in this course. Exercises in choreography and experiences in setting a dance for performance will be included. Spring semester. (Formerly PHED/THEA 256)

DANC 259 Dance Repertory (1 credit)
Students are taught a major choreographic work and rehearse it for performance. Spring semester. (Formerly PHED/THEA 259)

DANC 260 World Dance (3 credits)
This course is an introductory overview to some of the major dance traditions of the world, with emphasis on Asia, the Pacific, Africa and the Arctic. Offered once yearly. (Formerly PHED/THEA 260) (CFPA; CGCL)

DANC 263 Dance History to 1915 (3 credits)
Dance History to 1915 will investigate the development of Western theatrical dance from ancient civilization through Diaghilev’s Ballet Russe, including Romantic and Classical ballet. Students will gain a deeper understanding of the rich history of dance in its social, political and historical contexts. The course will focus on the development of Western theatrical dance through an exploration of prominent individuals, artistic trends and the continuing development of dance technique. *(Formerly PHED/THEA 263)* (CFPA)

DANC 264  Dance History from 1915 (3 credits)
Dance History from 1915 will investigate the development of Western theatrical dance from the end of Diaghilev’s Ballet Russe period to contemporary American choreographers, including Martha Graham, George Balanchine and Alvin Ailey. Students will gain a deeper understanding of the rich history of dance in its social, political and historical contexts. The course will focus on the development of Western theatrical dance through an exploration of prominent individuals, artistic trends and the continuing development of dance technique. *(Formerly PHED/THEA 264)* (CFPA)

DANC 298  Second Year Seminar (3 credits)
*Prerequisite: _ _ _ _199; Open to all sophomores and juniors who have completed ENGL 101, and the speaking skills requirement. Students with 54 or more transfer credits will have this requirement waived. Cannot be taken if _ _ _ _ 299 is taken for credit.*
Second Year Seminars (SYS) are speaking-intensive topic courses that build on the academic skills and habits introduced in the First Year Seminar. SYS courses engage students in a specific academic area of interest and provide them with the opportunity to reinforce, share and interpret knowledge. Students will improve their speaking, reading, research and basic information and technology skills while building the connections between scholarship and action that are required for lifelong learning. These courses will fulfill the Second Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one SYS course may be taken for credit. (CSYS)

DANC 299  Second Year Seminar (Writing Intensive) (3 credits)
*Prerequisite: _ _ _ _199; Open to all sophomores and juniors who have completed ENGL 101 and ENGL 102. Students with 54 or more transfer credits will have this requirement waived. Cannot be taken if _ _ _ _298 is taken for credit.*
Second Year Seminars (SYS) are writing-intensive topic courses that build on the academic skills and habits introduced in the First Year Seminar. SYS courses engage students in a specific academic area of interest and provide them with the opportunity to reinforce, share and interpret knowledge. Students will improve their writing, reading, research and basic information and technology skills while building the connections between scholarship and action that are required for lifelong learning. These courses will fulfill the Second Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one SYS course may be taken for credit. (CSYS)

DANC 353  Creative Dance for Children (3 credits)
*Prerequisite: DANP 281 or consent of instructor*
The study and experience of dance as a creative art activity for children is covered in this course. This course is for those planning to work with children in schools, camps, community centers or enrichment programs. *(Formerly PHED/THEA 353)*

DANC 357  Dance Production Theory (2 credits)
*Prerequisite: DANC 255 and DANC 256; or consent of instructor*
This course provides the opportunity to choreograph and plan the presentation of a major dance work. Lectures and practical assignments in choreography and stagecraft for dance result in a plan for a dance piece. Fall semester. *(Formerly PHED/THEA 357)*

DANC 358  Dance Production Techniques (1 credit)
This course provides students the opportunity to set a choreographed work for dancers and rehearse for presentation. Spring semester. *(Formerly PHED/THEA 358)*

DANC 359  Dance Ensemble Practicum (1 credit)
*Prerequisite: Open to sophomores and above, and second semester transfer students. Audition required.*
The Dance Ensemble is a pre-professional college company that prepares students technically to perform at various events including competitions and other dance productions. The Dance Ensemble also has a community outreach component, in which the company plans and orchestrates workshops with local schools and other institutions. Admittance to the Dance Ensemble is by audition only and is for the serious dancer and dance educator. Students who participate in the Dance Ensemble must commit to rehearsals, performances, fundraisers, outreach projects and group events. Students must be either concurrently enrolled in DANC 155 or commit to technical support of its concert. The class carries one credit and may be repeated a total of five times. *(Formerly THEA 359)*

DANC 399  Topical Studies in Dance (3 credits)
The class will offer variable contemporary topics in dance, such as reconstructions of artistic works. This course may be repeated for different topics. *Offered as topics arise.*

DANC 452  Ballet Pedagogy (3 credits)
Prerequisite: Minimum of intermediate level ballet training
The course is based on fundamental ballet technique -- the foundation of all dance training. It is intended to prepare the prospective dance teacher with the skills with which to provide safe and accurate dance training. (Formerly THEA 452)

DANC 453 Dance Methodology (3 credits)
Prospective teachers of dance will learn the various methods of teaching modern dance, jazz, and tap dance as well as social, folk and square dance and improvisation and composition. Emphasis will be on safe and correct techniques of teaching dance. Practical experiences in teaching will accompany lectures and discussion. (Formerly THEA 453)

DANC 494 Seminar in Dance Education (3 credits)
Prerequisite: Junior or senior standing in the Dance Education Concentration
The Seminar in Dance Education is a capstone course that will create a bridge for graduating majors between their college education and the professional world and satisfy the major writing intensive requirement. This course will address contemporary issues in both the public and private sectors in dance education. Students will investigate resources in the professional community and build connections to nonprofit organizations that serve dance in the region. Students will also learn how to write professional resumes, build a portfolio and develop their grant writing skills. (CWRM)

DANC 497 Advanced Individual Projects in Dance (1-3 credits)
Prerequisite: Junior standing; consent of faculty supervisor; additional prerequisites dependent on topic; and formal application required
The student contracts with faculty to explore learning activities of a creative nature beyond the scope of regular course offerings. This course may be repeated for up to six credit hours. Offered either semester.

DANC 498 Internship in Dance (3-15 credits)
Prerequisite: Consent of department; 2.5 overall GPA; formal application required
The internship provides an opportunity for junior and senior dance students to gain practical expertise in the fields of dance instruction or administration by participating in an off-campus work study experience that complements their academic preparation. Only three credits may be applied towards the dance concentration. This course may be repeated for a maximum of 15 credits.

DANC 499 Directed Study in Dance (1-3 credits)
Prerequisite: Consent of the department; formal application required
Directed study is open to juniors and seniors who have demonstrated critical and analytical abilities in their studies and who wish to pursue a project independently. This course may be taken twice for a maximum of six credits. Offered either semester.

DANCE - PHYSICAL EDUCATION

DANP 147 Theory and Practice of Ballet Fundamentals (2 credits)
This course gives students with little or no dance training the opportunity to obtain the essential fundamental concepts and skills of ballet technique. Emphasis is on correct placement, line and execution. In addition, through out-of-class research, students will obtain general background about ballet which, combined with intensive class work, is intended to create technically proficient and artistically enriched dancers. One hour of lecture and two hours of laboratory weekly. (Formerly PHED 147)

DANP 153 Jazz Dance (1 credit)
This course provides experiences with a variety of jazz styles, including lyric and percussive. Emphasis is on performance of choreographed routines and mastery of isolations and syncopations. (Formerly PHED 153)

DANP 159 Latin Social Dance (1 credit)
This course will offer an introduction to the major dances of the Caribbean: Mambo (commonly known as Salsa), Merengue, Cha Cha and the internationally popular tango. This course will cover the basic steps, patterns, history and cultural significance of each dance. These dances will be taught in the modern style that is now popular in social settings.

DANP 161 Folk Dance (1 credit)
This course will introduce folk dance terminology, formations and dance steps. Course will include insight into the background and customs of the people in the countries where the dances originated. (Formerly PHED 161)

DANP 164 Square Dance (1 credit)
This course is an introduction to the contemporary square dance. (Formerly PHED 164) Addenda: This course has been changed effective spring 2012. See the Catalog Addenda section of this publication for detailed information.
DANP 165  Tap Dance I (1 credit)
This course will explore the basic skills of tap dance using physical practice analysis, film critiques and performance. Basic tap vocabulary will be mastered. (Formerly PHED 165)

DANP 166  African Dance (1 credit)
This course will introduce students to the dance styles of Africa and the Caribbean using the Dunham techniques as its technical base. There will be discussion of the cultural history of African and Caribbean styles and their effect on American dance. (Formerly PHED 166)

DANP 167  Hip-Hop Dance (1 credit)
The course will present the basic technique of hip-hop dance. (Formerly PHED 167)

DANP 168  Ballroom Dance (1 credit)
This course will introduce students to the basic steps, rhythms and timing and performance. Dances covered will include the waltz, fox trot, swing, polka and a sampler of Latin dances. (Formerly PHED 168)

DANP 199  First Year Seminar (3 credits)
Prerequisite: Open to all freshmen with a writing placement score of 3 or above or a SAT score of 500 or above or who have completed ENGL 101. Students with 24 or more transfer credits will have this requirement waived.
First Year Seminars (FYS) are writing-intensive topic courses that introduce students to academic thought, discourse and practices. FYS courses prepare and orient students toward productive and fulfilling college careers by actively engaging them in a specific academic area of interest. Students will improve their writing, reading, research and basic information and technology skills, while learning to work both collaboratively and independently. These courses will fulfill the First Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one FYS course may be taken for credit. (CFYS)

DANP 235  Rhythmic Activities: Programming for All Ages (1 credit)
This course is designed to provide a basic understanding of rhythmical movements and their application for programming for all age groups. The course will include a variety of expressive locomotion, non-locomotor and manipulative movements. (Formerly PHED 235)

DANP 237  Theory and Practice of Jazz Dance, Fall (2 credits)
Prerequisite: Dance experience. Students may self-select.
This course will offer intermediate-level work in the technique and performance of jazz dance. It will also provide a historical overview of jazz dance and some of its most influential artists, so that students gain an understanding of the origins of jazz dance, its various styles and influences and how it differs from other dance forms. In addition to the art and technique of dance being practiced and performed in class, various other assignments will be required including reading and writing assignments and critiques of video and live performances. This course may be repeated once for credit. One hour of lecture and two hours of laboratory weekly. (Formerly PHED 237)

DANP 242  Theory and Practice of Ballet, Fall (2 credits)
Prerequisite: Ballet experience. Students may self-select.
This course gives students with an elementary level of training the opportunity to establish, develop and refine classical ballet technique. Emphasis is on correct placement, line and execution. In addition, through out-of-class research students will obtain general background about ballet, which combined with intensive class work, is intended to create dancers technically proficient and artistically enriched. This course may be repeated once for credit. One hour of lecture and two hours of laboratory weekly. (Formerly PHED 242)

DANP 245  Theory and Practice of Ballet, Spring (2 credits)
This course gives students with an intermediate-level of training the opportunity to establish, develop and refine classical ballet technique. Emphasis is on correct placement, line and execution. An analytical approach to the relation between muscle control and technique is used to intensify the effectiveness of training. In addition, through out-of-class research students will obtain general background about ballet which, combined with intensive class work, is intended to create dancers technically proficient and artistically enriched. The class is a continuation of topics addressed in DANP 242 but is not dependent on being taken in sequence. This course may be repeated once for credit. One hour of lecture and two hours of laboratory weekly. (Formerly PHED 245)

DANP 247  Theory and Practice of Jazz Dance, Spring (2 credits)
Prerequisite: Dance experience. Students may self-select.
This course will offer intermediate-level work in the technique and performance of jazz dance. It will also provide a historical overview of jazz dance and some of its most influential artists, so that students gain an understanding of the origins of jazz dance, its various styles and influences and how it differs from other dance forms. In addition to the art and technique of dance being practiced and performed in class, various other assignments will be required, including reading and writing assignments and critiques of video and live performances. The class is a continuation of topics addressed in DANP 237 but is not dependent on being taken in sequence. This course may be repeated once for credit. One hour of lecture and two hours of laboratory weekly. (Formerly PHED 247)
DANP 248  Theory and Practice of Modern Dance, Fall (2 credits)
Prerequisite: Dance experience. Students may self-select.
This course will offer intermediate-level work in the technique and performance of modern dance. It will also provide a historical overview of modern dance and some of its most influential artists, so that students gain an understanding of the origins of modern dance, its various styles and influences and how it differs from other dance forms. In addition to the art and technique of dance being practiced and performed in class, various other assignments will be required, including reading and writing assignments and critiques of video and live performances. This course may be repeated once for credit. One hour of lecture and two hours of laboratory weekly. (Formerly PHED 248)

DANP 249  Theory and Practice of Modern Dance, Spring (2 credits)
Prerequisite: Dance experience. Students may self-select.
This course will offer intermediate-level work in the technique and performance of modern dance. It will also provide a historical overview of modern dance and some of its most influential artists, so that students gain an understanding of the origins of modern dance, its various styles and influences and how it differs from other dance forms. In addition to the art and technique of dance being practiced and performed in class, various other assignments will be required, including reading and writing assignments and critiques of video and live performances. The class is a continuation of topics addressed in DANP 248 but is not dependent on being taken in sequence. This course may be repeated once for credit. One hour of lecture and two hours of laboratory weekly. (Formerly PHED 249)

DANP 259  Theory and Practice of Latin Social Dance (2 credits)
This semester-long course will offer an introduction to the major dances of the Caribbean: Mambo and Guaracha (both commonly known as Salsa), Merengue, Cha Cha Cha and Bachata. These dances will be taught in the modern style that is now popular in social settings. There will be a focus on the concepts of lead and follow, step patterns and turn patterns. Throughout, the instructor will integrate a discussion of the historical and cultural significance of these dances and how they have come to enjoy a worldwide following.

DANP 268  Ballroom Dance II - Theory, Practice and Performance (1 credit)
Prerequisite: DANP 168 or consent of instructor
This course will be a continuation of the theory, practice and performance of ballroom dance. Intermediate theory, practice and performance of the swing, tango, Cha Cha, waltz, fox trot and selected Latin dances will be covered. (Formerly PHED 268)

DANP 271  Theory and Practice of Tap Dance (2 credits)
Prerequisite: Dance experience. Students may self-select.
This course will offer intermediate-level work in the technique and performance of tap dance. It will also provide a historical overview of tap dance and some of its most influential artists, so that students gain an understanding of the origins of tap dance, its various styles and influences and how it differs from other dance forms. In addition to the art and technique of dance being practiced and performed in class, various other assignments will be required, including reading and writing assignments and critiques of video and live performances. This course may be repeated once for credit. One hour of lecture and two hours of laboratory weekly. (Formerly PHED 271)

DANP 278  Theory and Practice of Educational Dance (2 credits)
This course will involve students in creative/expressive dance using Laban’s Movement Framework as a basis for content. Knowledge of this content will give students a foundation for dance teaching in all settings. Additionally, students will have an opportunity to choreograph dance sequences both individually and in small groups. The intent is for both the non-dancer and the trained dancer to be comfortable in the creative environment. Offered fall semester. (Formerly PHED 278)

DANP 298  Second Year Seminar (Speaking Intensive) (3 credits)
Prerequisite: ___ ___ 199; Open to all sophomores and juniors who have completed ENGL 101, and the speaking skills requirement. Students with 54 or more transfer credits will have this requirement waived. Cannot be taken if ___ ___ 299 is taken for credit.
Second Year Seminars (SYS) are speaking-intensive topic courses that build on the academic skills and habits introduced in the First Year Seminar. SYS courses engage students in a specific academic area of interest and provide them with the opportunity to reinforce, share and interpret knowledge. Students will improve their speaking, reading, research and basic information and technology skills while building the connections between scholarship and action that are required for lifelong learning. These courses will fulfill the Second Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one SYS course may be taken for credit. (CSYS)

DANP 299  Second Year Seminar (Writing Intensive) (3 credits)
Prerequisite: ___ ___ 199; Open to all sophomores and juniors who have completed ENGL 101 and ENGL 102. Students with 54 or more transfer credits will have this requirement waived. Cannot be taken if ___ ___ 298 is taken for credit.
Second Year Seminars (SYS) are writing-intensive topic courses that build on the academic skills and habits introduced in the First Year Seminar. SYS courses engage students in a specific academic area of interest and provide them with the opportunity to reinforce, share and interpret knowledge. Students will improve their writing, reading, research and basic information and technology skills while building the connections between scholarship and action that are required for lifelong learning. These courses will fulfill the Second Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one SYS course may be taken for credit. (CSYS)
requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one SYS course may be taken for credit. (CSYS)

**DANP 499 Directed Study in Dance - Physical Education (1-3 credits)**
*Prerequisite: Consent of the department; formal application required*
Directed study is open to all juniors and seniors who have demonstrated critical and analytical abilities in their studies and who wish to pursue a project independently. This course may be taken twice for a maximum of six credits.

**Dance - Physical Education: Other Approved Courses**

**DANP 139 - Theory and Practice of Dance Fundamentals**

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**EARLY CHILDHOOD EDUCATION**

**ECED 199 First Year Seminar (3 credits)**
*Prerequisite: Open to all freshmen with a writing placement score of 3 or above or a SAT score of 500 or above or who have completed ENGL 101. Students with 24 or more transfer credits will have this requirement waived.*
First Year Seminars (FYS) are writing-intensive, topic courses that introduce students to academic thought, discourse and practices. FYS courses prepare and orient students toward productive and fulfilling college careers by actively engaging them in a specific academic area of interest. Students will improve their writing, reading, research and basic information and technology skills while learning to work both collaboratively and independently. These courses will fulfill the First Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one FYS course may be taken for credit. (CFYS)

**ECED 230 The Basics of Early Childhood Education (3 credits)**
This foundation course examines early childhood education (birth through grade 2) from a variety of perspectives including historical, sociocultural and developmental. A 40-hour, field-based experience is attached to this course. This field-based experience is used to contextualize topics and issues including typical and atypical child development, learning theories, diversity, develop-mentally-appropriate practices, teaching models and approaches, professional teaching standards and critical issues related to teaching and child growth and development. This course prepares students to apply for admission into both the teaching licensure and Early Education and Care programs.

**ECED 280 Creative Techniques in Early Childhood (3 credits)**
*Prerequisite: ECED 230 and PSYC 224*
The course prepares teachers of very young children in techniques that are developmentally appropriate. Students will learn instructional strategies that incorporate the various movement, visual, performance and language arts into early childhood projects, activities and routines, both within the classroom and in community settings. (Formerly ECED 380)

**ECED 298 Second Year Seminar (Speaking Intensive) (3 credits)**
*Prerequisite: _ _ _ _ 199; Open to all sophomores and juniors who have completed ENGL 101, and the speaking skills requirement.*
Second Year Seminars (SYS) are speaking-intensive topic courses that build on the academic skills and habits introduced in the First Year Seminar. SYS courses engage students in a specific academic area of interest and provide them with the opportunity to reinforce, share and interpret knowledge. Students will improve their speaking, reading, research and basic information and technology skills while building the connections between scholarship and action that are required for lifelong learning. These courses will fulfill the Second Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one SYS course may be taken for credit. (CSYS)

**ECED 299 Second Year Seminar (Writing Intensive) (3 credits)**
*Prerequisite: _ _ _ _ 199; Open to all sophomores and juniors who have completed ENGL 101 and ENGL 102. Students with 54 or more transfer credits will have this requirement waived. Cannot be taken if _ _ _ _ 298 is taken for credit.*
Second Year Seminars (SYS) are writing-intensive topic courses that build on the academic skills and habits introduced in the First Year Seminar. SYS courses engage students in a specific academic area of interest and provide them with the opportunity to reinforce, share and interpret knowledge. Students will improve their writing, reading, research and basic information and technology skills while building the connections between scholarship and action that are required for lifelong learning. These courses will fulfill the Second Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one SYS course may be taken for credit. (CSYS)
ECED 300  Early Childhood Art Methods (.5 credit)
Prerequisite: Admission to the Professional Education Program and passing scores on all appropriate MTEL®: Communication and Literacy, Foundations of Reading and Early Childhood
This course is an introduction to methods and materials in art for the early childhood teacher. Art projects typical of those done by children grades PreK-2 are produced. Classroom management, bulletin board design and lesson introduction techniques are explored. Graded on a (P) Pass/(N) No Pass basis. Either semester.

ECED 311  Science and Social Studies Inquiry for the Young Child (3 credits)
Prerequisite: Admission to the Professional Education Program and passing scores on all appropriate MTEL®: Communication and Literacy, Foundations of Reading and Early Childhood
The major concepts and process skills in science and social studies will be experienced in this course and emphasis will be on the learning environment. Students will learn how to help children move from specific information toward general statements, concepts and generalizations in an inductive process using convergent and divergent thinking.

ECED 332  Reading Development for the Young Child (3 credits)
Prerequisite: Admission to the Professional Education Program and passing scores on all appropriate MTEL®: Communication and Literacy, Foundations of Reading and Early Childhood
In this course, early childhood majors will learn how to create the conditions that facilitate the acquisition of literacy. The roles of print processing strategies, guided reading experiences and voluntary, independent reading are explored along with the relationship between reading and writing. Prepracticum experiences include reading aloud, shared book experiences and teaching guided reading lessons.

ECED 342  Language Arts for the Young Child (3 credits)
Prerequisite: Admission to the Professional Education Program and passing scores on all appropriate MTEL®: Communication and Literacy, Foundations of Reading and Early Childhood
In this course, through the use of an integrated approach of content, the student will develop strategies for the teaching of language arts, which build on the relation of thought and word and the changes in that process that develop competencies in listening, speaking, writing and reading as a union of word and thought. (CWRM)

ECED 352  Developmental Mathematics for the Young Child (3 credits)
Prerequisite: Admission to the Professional Education Program and passing scores on all appropriate MTEL®: Communication and Literacy, Foundations of Reading and Early Childhood
In this course, through the use of an integrated approach of content, the student will develop strategies in math that are concept-oriented in which the primary emphasis is on thinking, reasoning and understanding with an emphasis on developing in young children the ability to investigate how and why things happen in math. In a prepracticum experience the student will teach a series of lessons in math at the primary level.

ECED 361  Creating an Effective Early Childhood Environment (3 credits)
Prerequisite: Admission to the Professional Education Program and passing scores on all appropriate MTEL®: Communication and Literacy, Foundations of Reading and Early Childhood
This course explores ways to create a developmentally appropriate, standards-based, inclusive early childhood setting (PreK-2). Topics include early childhood standards, issues of diversity and multicultural education, classroom-based “inclusive” teaching and assessment strategies, management techniques and parent-community relationships. Teacher candidates will also continue to gather evidence for their Professional Teaching Portfolio.

ECED 493  Internship in Early Childhood Education (6 or 12 credits)
Prerequisite: Consent of the department and admission to the Professional Education Program
For this internship, a minimum of 300 clock hours will be required in a PreK-2 grade setting as an early childhood teacher. This internship must be less than full-time but at least one-fifth time employment as an early childhood teacher. Request for this course must be made to the College of Education and Allied Studies Office. May be taken for graduate-level credit.

ECED 496  Supervised Teaching in Public Schools: Early Childhood (6 or 12 credits)
Prerequisite: Acceptance into student teaching
This student-teaching practicum is a supervised experience. Candidates are assigned by the College of Education and Allied Studies to an appropriate primary classroom (grades K-2) where they will work to develop and refine their teaching skills. Candidates will have the opportunities to observe students and classrooms, design curriculum, practice effective classroom-management techniques, utilize contemporary teaching strategies and differentiate instruction to meet the needs of all learners. Candidates will be coached and supervised by a qualified, on-site cooperating practitioner and a faculty member of the elementary and early childhood department. Candidates are required to attend periodic seminars on educational topics relevant to the student teaching experience. Candidates must demonstrate their competencies for initial teaching licensure and complete all departmental requirements. May be taken for graduate-level credit.
ECED 497  Supervised Teaching in an Integrated Early Childhood Setting (6 credits)
Prerequisite: Acceptance into student teaching
This student-teaching practicum is a supervised experience for one quarter. Candidates are assigned by the College of Education and Allied Studies to an appropriate preschool or kindergarten setting where they will work to develop and refine their teaching skills with children of diverse backgrounds. Candidates will have the opportunity to observe children and various learning environments, design developmentally appropriate curriculum, practice effective management techniques, utilize contemporary teaching strategies, and differentiate instruction to meet the needs of all learners. Candidates will be coached and supervised by a qualified, on-site practitioner and a faculty member of the Department of Elementary and Early Childhood. Candidates are required to attend periodic seminars on educational topics relevant to the student teaching experience. Candidates must demonstrate their competencies for initial teaching licensure and complete all department requirements. May be taken for graduate-level credit.

ECED 499  Directed Study in Early Childhood Education (1-3 credits)
Prerequisite: Consent of department; formal application required
Directed study is open to juniors and seniors who have demonstrated critical and analytical abilities in their studies and who wish to pursue a project independently. This course may be taken two times for a maximum of six credits.

ECED 503  Directed Study (1-3 credits)
Prerequisite: Consent of the department; formal application required
Directed study is designed for the graduate student who desires to study selected topics in a specific field. For details, consult the paragraph titled “Directed or Independent Study” in the “College of Graduate Studies” section of this catalog. This course may be repeated for a maximum of six credits.

ECED 510  Fundamentals of Early Childhood (3 credits)
This course prepares students to enter the graduate program for initial licensure in Early Childhood Education (PreK-2). Developmentally appropriate practices for children birth to grade 2 are examined from a variety of developmental, historical, learning theory and sociocultural perspectives. As part of the course, students spend 15 hours as participant-observers in a public integrated preschool or Head Start classroom and 25 hours in a K-2 elementary classroom. Field-based observations are used to explore issues of child development, learning, family partnerships, accommodating diverse learners and developmentally appropriate curriculum covered in the context of course readings, activities, discussions and independent research.

ECED 515  Inclusive Early Childhood Classrooms: Instructional Practices and Assessment (3 credits)
Prerequisite: Admission to the Professional Education Program
By participating in in-class and out-of-class experiences and by reviewing the literature related to child development, researched-based instructional and assessment practices, and other topics related to preschool and primary grade classrooms, including child-study procedures and current laws, teacher candidates will be able to design inclusive classrooms and use various assessment strategies to guide instructional supports and strategies that support all young children in this course.

ECED 563  Early Childhood Curriculum: Ages 5-7 (3 credits)
For students interested in planning teaching strategies for primary grades. Course explores language arts, math, science, social sciences and classroom management. Observation and participation field component included.

ECED 570  Special Topics in Early Childhood Education (1-4 credits)
Prerequisite: Course prerequisite may be specified depending upon the nature of the topic
Special topics of current relevance in early childhood education will be offered from time to time. The topic to be addressed will be announced prior to registration. This course may be taken more than once with consent of the adviser.

ECED 596  Practicum: Early Childhood Education (6 or 12 credits)
Prerequisite: Acceptance and good standing in teacher preparation program
This graduate-level practicum involves an eight- or 15-week field experience at the K-2 level under the guidance of a cooperating teacher and a university supervisor. Opportunities for participation in pupil observation, program planning and utilization of contemporary teaching strategies are included. Either semester.

ECED 597  Practicum: Preschool (6 credits)
Prerequisite: Acceptance and good standing in teacher preparation program
This graduate-level practicum involves a supervised student teaching experience in a preschool setting with children, infancy through age five. Emphasis will be placed on development, implementation and evaluation of innovative preschool programs. The student participates in a total program, five days a week for eight weeks, in either a day care center, nursery school or head start program. Either semester.

ECED 598  Internship: Early Childhood Education (6 credits)
Prerequisite: Consent of the department
This graduate-level internship involves a minimum of 300 clock hours in a PreK-2 grade setting as an early childhood teacher. Internship must be less than full-time but at least one-fifth-time employment as an early childhood teacher. Request for this course must be made to the College of Education and Allied Studies Office.

ECPK 199 First Year Seminar (3 credits)
Prerequisite: Open to all freshmen with a writing placement score of 3 or above or a SAT score of 500 or above or who have completed ENGL 101. Students with 24 or more transfer credits will have this requirement waived.
First Year Seminars (FYS) are writing-intensive, topic courses that introduce students to academic thought, discourse and practices. FYS courses prepare and orient students toward productive and fulfilling college careers by actively engaging them in a specific academic area of interest. Students will improve their writing, reading, research and basic information and technology skills while building the connections between scholarship and action that are required for lifelong learning. These courses will fulfill the First Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one FYS course may be taken for credit. (CSYS)

ECPK 298 Second Year Seminar (Speaking Intensive) (3 credits)
Prerequisite: _ _ _ _ 199; Open to all sophomores and juniors who have completed ENGL 101 and ENGL 102. Students with 54 or more transfer credits will have this requirement waived. Cannot be taken if _ _ _ _ 299 is taken for credit.
Second Year Seminars (SYS) are speaking-intensive, topic courses that build on the academic skills and habits introduced in the First Year Seminar. SYS courses engage students in a specific academic area of interest and provide them with the opportunity to reinforce, share and interpret knowledge. Students will improve their speaking, reading, research and basic information and technology skills while building the connections between scholarship and action that are required for lifelong learning. These courses will fulfill the Second Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one SYS course may be taken for credit. (CSYS)

ECPK 299 Second Year Seminar (Writing Intensive) (3 credits)
Prerequisite: _ _ _ _ 199; Open to all sophomores and juniors who have completed ENGL 101 and ENGL 102. Students with 54 or more transfer credits will have this requirement waived. Cannot be taken if _ _ _ _ 298 is taken for credit.
Second Year Seminars (SYS) are writing-intensive, topic courses that build on the academic skills and habits introduced in the First Year Seminar. SYS courses engage students in a specific academic area of interest and provide them with the opportunity to reinforce, share and interpret knowledge. Students will improve their writing, reading, research and basic information and technology skills while building the connections between scholarship and action that are required for lifelong learning. These courses will fulfill the Second Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one SYS course may be taken for credit. (CSYS)

ECPK 320 Language Development and Early Literacy (PreK-K) (3 credits)
Prerequisite: ECED 230 and PSYC 224 or consent of instructor
This course focuses on the emergence of both expressive and receptive language and literacy competencies in young children. Topics include optimal language and print environments; the socio-cultural, genetic and physiological components of optimal language and literacy development; early indicators of the need for and remediation of language-, hearing-, and literacy-related difficulties; and second language acquisition. This course must be taken at Bridgewater State University.

ECPK 321 Project-Based, Standards-Rich Learning in Early Childhood (PreK-K) (3 credits)
Prerequisite: ECED 230 and PSYC 224; or equivalent or consent of instructor
This course focuses on implementing a curriculum consistent with the Massachusetts' content area guidelines -- particularly those for mathematics, science and social studies -- with an emphasis on play-based, integrated learning. This course must be taken at Bridgewater State University.

ECPK 322 Observation and Assessment in Early Childhood (PreK-K) (3 credits)
Prerequisite: ECED 230 and PSYC 224 and SPED 211
This course teaches students to make ethical, appropriate, valid and reliable assessment an integral part of their practice. Students will learn to identify and use observation and assessment methods, both formal and informal, that are developmentally appropriate as well as culturally and linguistically responsive, and to make collaborative decisions that are responsive to young children's strengths, progress and needs. This course must be taken at Bridgewater State University.

ECPK 323 Managing Positive Environments for Children (PreK-K) (3 credits)
Prerequisite: ECED 230 and PSYC 224 and SPED 211
This course focuses on how to set up and manage respectful learning environments that encourage young children to manage their own behaviors and learn to resolve conflicts peaceably.
ECPK 490  Mentored Program Observation, PreK-K (3 credits)
Prerequisite: ECPK 321 and ECPK 322
This course consists of observations and fieldwork in various PreK-K settings, including Head Start and integrated preschools. This course must be successfully completed prior to the final field experience, ECPK 492. This course must be taken at Bridgewater State University. (CWRM)

ECPK 491  Mentored Performance Fieldwork I (PreK-K) (3 credits)
Prerequisite: ECED 230 and ECPK 320 and ECPK 321 and PSYC 224; consent of department; formal application required
This course involves field experience in the student's workplace or in an assigned practicum placement. Students will document knowledge and competencies regarding health, safety, and administration issues and policies in early childhood settings. This experience requires a minimum of 75 documented hours in a PreK-K setting. It must be supervised by a qualified college supervisor or instructor and by a licensed, site-based teacher. It must be completed prior to the final field experience, ECPK 492.

ECPK 492  Mentored Performance Fieldwork II (PreK-K) (3 or 6 credits)
Prerequisite: Completion of all other program requirements; consent of department and formal application required
This course involves fieldwork in the student's workplace or in an assigned practicum placement. This experience requires a minimum of 150 documented hours (six credits) in a PreK-K setting. The experience may be taken in 75 documented-hour increments (three credits). The experience must be supervised by a qualified college supervisor and by a licensed, site-based teacher. Students maintain a log and develop a performance portfolio demonstrating their competencies, including family outreach, professional networking and child advocacy activities. The experience may be taken as a quarter course or extended across two consecutive semesters. This course must be taken at BSU. This course is repeatable for a maximum of six credits.

ECPK 499  Directed Study (1-3 credits)
Prerequisite: Consent of the department; formal application required
Directed study is open to juniors and seniors who have demonstrated critical and analytical abilities in their studies and who wish to pursue a project independently. This course may be taken twice for a maximum of six credits.

Early Childhood Education: Other Approved Courses

ECED 400 - Creative Techniques for Teaching
ECED 475 - Seminar in Early Childhood Education
ECED 498 - Internship in Early Childhood Education (Non-Licensure)
ECED 561 - Current Issues in Early Childhood Education
ECED 562 - Early Childhood Curriculum: Ages 2-5
ECED 564 - Administration of Early Childhood Programs
ECED 575 - Graduate Seminar in Early Childhood Education

EARTH SCIENCES

EASC 100  Physical Geology (4 credits)
This course is an introduction to the processes that formed and continue to shape the earth. Lecture topics include continental drift, rock and mineral forming processes, and the effects of agents of erosion such as glaciers, streams and waves. The laboratories develop skill in rock identification and map interpretation. Three hours of lecture and one two-hour laboratory period weekly. Either semester. (CNSL)

EASC 101  Historical Geology (4 credits)
Prerequisite: EASC 100
This course is an introduction to the origin and evolution of the earth. Topics include the development and transformation of continents, ocean basins, the atmosphere and life over geologic time. An emphasis is placed on modeling earth's evolution from observations of the rock record. The laboratory fosters development of field and quantitative skills. Three hours of lecture and one two-hour laboratory weekly. Spring semester.

EASC 102  History of the Earth (3 credits)
The geologic origin and evolution of the planet earth is surveyed in this course. An emphasis is placed on the co-evolution of life and the changing surface environment over geologic time. Spring semester. (CNSN)

EASC 135  Geology of National Parks and Monuments (3 credits)
This course is designed to introduce students to the wonders and basic geologic processes and principles used to study the geological history of selected national parks and monuments throughout the United States. Lectures will be supplemented with slides, maps and geologic specimens for the regions discussed in class. (CNSN)

**EASC 150  Earth’s Climate (3 credits)**
Climate change is an important and hotly debated topic both in the scientific community and in people’s everyday lives. This course will look at how the Earth’s climate has changed over the last 4.6 billion years, what we know about those changes, and how this information can help us today and into the future. We will examine basic techniques used by scientists to read the climate record and how to analyze this data. Discussion will center on causes for past climate changes and how humans today are possibly impacting or causing a shift in the Earth’s climate. (CNSN)

**EASC 180  Forensic Geology (3 credits)**
This course will examine how the scientific method is applied to a diverse set of geologic conditions that assist law enforcement and are used in solving criminal investigations. This geologic evidence is in general used to place a person or object at the scene of a crime or show travel path. Case studies will be used to highlight how geology, and understanding geologic processes, can be used to help provide valuable information in solving various crimes or litigation problems. Classroom assignments and group work in the hands-on investigative approach to solving a “crime” are constructed to provide a more effective introductory geology experience. (CNSN)

**EASC 194  Environmental Geology (3 credits)**
This course introduces students to the application of geologic principles in recognizing and controlling the effects of environmental problems such as earthquakes, volcanoes, floods, beach erosion, hazardous waste disposal, mining, petroleum exploration and ground water quality. Either semester. (CNSN)

**EASC 199  First Year Seminar (3 credits)**
Prerequisite: Open to all freshmen with a writing placement score of 3 or above or a SAT score of 500 or above or who have completed ENGL 101. Students with 24 or more transfer credits will have this requirement waived.
First Year Seminars (FYS) are writing-intensive, topic courses that introduce students to academic thought, discourse and practices. FYS courses prepare and orient students toward productive and fulfilling college careers by actively engaging them in a specific academic area of interest. Students will improve their writing, reading, research and basic information and technology skills while learning to work both collaboratively and independently. These courses will fulfill the First Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one FYS course may be taken for credit. (CFYS)

**EASC 210  Oceanography (3 credits)**
Prerequisite: Any 100-level biology, chemistry, earth science, geography (physical science), or physics course
This course surveys the physical and chemical aspects of earth’s ocean, including the geology of the seafloor, ocean currents, tides, waves, sediment transport and deposition, seawater chemistry and submarine hot springs. An emphasis is also placed on oceanographic research expeditions and the tools used by scientists to explore the seafloor. Spring semester. (Formerly EASC 305)

**EASC 215  Solar System Astronomy (3 credits)**
Prerequisite: Any 100-level biology, chemistry, earth science, geography (physical science) or physics course
This course focuses on the physical, chemical, geological and biological processes operating in the solar system. Topics include celestial mechanics, radiation and spectroscopy, solar processes, planetary interiors, surfaces and atmospheres, the origin of life and theories of the origin and evolution of the solar system. Fall semester.

**EASC 240  Hydrology (4 credits)**
Prerequisite: Consent of instructor
This course examines the hydrologic cycle, including precipitation, infiltration, evaporation, transpiration, stream flow and ground-water flow. The laboratory will focus on field measurements with an emphasis on modeling of groundwater flow from a physical and chemical perspective. Basic water laws and regulations, as well as contamination issues are also reviewed. Two hours of lecture and one four-hour laboratory weekly. Spring semester.

**EASC 250  Geomorphology (4 credits)**
Prerequisite: EASC 101
This course examines the natural processes that control the development of earth's surface topography on many different scales. The role on internal processes such as tectonics is explored in addition to surface processes related to the action of rivers, glacial ice, wind, waves, currents and tides. Laboratory work focuses on the identification and interpretation of land-forms on topographic maps. Two hours of lecture and one four-hour laboratory weekly. Fall semester.

**EASC 260  Mineralogy (4 credits)**
Prerequisite: EASC 101 and CHEM 131 or CHEM 141
This course investigates the minerals that compose the solid earth. Topics to be covered include the physical and chemical properties of minerals, mineral structures, mode of occurrence, mineral formation and crystallography. Laboratory work will involve mineral identification using visual observation and state-of-the-art analytical equipment including X-ray diffraction and optical microscopy. Two hours of lecture and one four-hour laboratory weekly.

EASC 280 Vertebrate Paleontology (3 credits)
Prerequisite: EASC 101
This course examines the nearly 500 million-year history of vertebrate life on Earth and the origin of the major innovations that characterize its diversity. This diversity will be considered in the light of various classification methods, and the major innovations will be discussed in the context of various mechanisms of evolution. Fall semester.

EASC 298 Second Year Seminar (Speaking Intensive) (3 credits)
Prerequisite: _ _ _ _ 199; Open to all sophomores and juniors who have completed ENGL 101, and the speaking skills requirement. Students with 54 or more transfer credits will have this requirement waived. Cannot be taken if _ _ _ _ 299 is taken for credit.
Second Year Seminars (SYS) are speaking-intensive, topic courses that build on the academic skills and habits introduced in the First Year Seminar. SYS courses engage students in a specific academic area of interest and provide them with the opportunity to reinforce, share and interpret knowledge. Students will improve their speaking, reading, research and basic information and technology skills while building the connections between scholarship and action that are required for lifelong learning. These courses will fulfill the Second Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one SYS course may be taken for credit. (CSYS)

EASC 299 Second Year Seminar (Writing Intensive) (3 credits)
Prerequisite: _ _ _ _ 199; Open to all sophomores and juniors who have completed ENGL 101 and ENGL 102. Students with 54 or more transfer credits will have this requirement waived. Cannot be taken if _ _ _ _ 298 is taken for credit.
Second Year Seminars (SYS) are writing-intensive, topic courses that build on the academic skills and habits introduced in the First Year Seminar. SYS courses engage students in a specific academic area of interest and provide them with the opportunity to reinforce, share and interpret knowledge. Students will improve their writing, reading, research and basic information and technology skills while building the connections between scholarship and action that are required for lifelong learning. These courses will fulfill the Second Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one SYS course may be taken for credit. (CSYS)

EASC 320 Geology of New England (3 credits)
Prerequisite: EASC 101
This course will examine the geological history of New England and adjacent areas with an emphasis on the last 500 million years of geologic time. In this context, the tectonic history of New England will be explored in detail. Other important topics include the changing surface environment with a focus on ice ages and climate change. The laboratory will emphasize the use of geologic maps and field trips to areas of geologic significance in southeastern New England. Two hours of lecture and one four-hour laboratory period weekly. Fall semester.

EASC 350 Structural Geology (4 credits)
Prerequisite: EASC 250
This course explores the origin and analysis of rock structures produced by deformation. Laboratory exercises involve the construction and interpretation of geologic maps and geometric analysis of rock structures. Field trips will emphasize mapping skills and the interpretation of rock sequences. Two hours of lecture and one four-hour laboratory weekly. Spring semester.

EASC 360 Petrology (4 credits)
Prerequisite: EASC 260
This course explores the properties, occurrences, origin and classification of the igneous, metamorphic and sedimentary rocks that compose the solid earth. Laboratory work will include the examination of rocks through visual observation and thin section analyses using the optical petrographic microscope. Field trips will examine the geology of southeastern New England. Two hours of lecture and one four-hour laboratory weekly. Spring semester. (Formerly EASC 463) (CWRM)

EASC 370 Sedimentology and Stratigraphy (4 credits)
Prerequisite: EASC 101
This course examines the composition, texture, morphology and dynamics of sediments in different environments and their relation to the stratification and structure of sedimentary rocks. The laboratory work fosters the development of research skills through quantitative analyses of sediment and a term project consisting of a thorough description and interpretation of sediment samples collected from a local/regional sedimentary environment. Two hours of lecture and one four-hour laboratory weekly. Fall semester.
EASC 450  Geochemistry (4 credits)
Prerequisite: CHEM 142
This course explores the application of thermodynamic principles to solve geologic problems. The chemical interaction of rock and water will be emphasized, as it relates to the chemistry of natural waters on and near the surface of the earth, rock weathering and global geochemical cycles. Laboratory work will include the analytical techniques used to measure water chemistry and computer modeling of natural geochemical systems. Two hours of lecture and one four-hour laboratory weekly. Fall semester, odd years.

EASC 455  Honors Thesis (3 credits)
Prerequisite: Open to earth science majors in the Commonwealth Honors Program or Departmental Honors Program and consent of instructor
The honors thesis is the culmination of a student's work in the honors program and consists of an advanced student-generated research project to be completed by taking the honors thesis for a total of six credits over two semesters. Students will meet regularly with their thesis adviser and the thesis is read for approval by the departmental Honors Committee or its designees. This course may be repeated for a maximum of six credits.

EASC 460  Geophysics (4 credits)
Prerequisite: PHYS 182 or PHYS 244
In this course, students will apply physics to solve geological problems. Topics include seismology, the Earth's gravitational and magnetic fields, heat flow, plate tectonics and the internal structure of the Earth. The laboratory involves problem solving and field measurements using modern geophysical equipment to image the subsurface. Geophysical techniques relevant to oil, gas and mineral exploration as well as engineering and environmental applications are examined. Two hours of lecture and one four-hour laboratory weekly. Fall semester.

EASC 470  Paleontology (4 credits)
Prerequisite: EASC 370
This course includes a survey of the last 500 million years of the Earth's fossil record. The most recent developments in the origin and diversification of the animal phyla are considered along with their environmental relationships. The laboratory sessions involve quantitative methods in the study of fossils. Two hours of lecture and one four-hour laboratory weekly. Spring semester.

EASC 471  Coastal Processes (3 credits)
Prerequisite: MATH 100; and EASC 100 or GEOG 121
The frequently complex fluid-solid interactions which result in erosion and deposition in coastal environments are developed in this course. Methods of measurement and prediction are presented.

EASC 480  Remote Sensing (4 credits)
Prerequisite: Consent of instructor
Remote sensing is the measurement and characterization of the earth using satellites and airborne platforms. This course covers the theory of remote sensing and the acquisition, analysis and interpretation of image data collected from the visible, infrared, microwave and thermal portions of the electromagnetic spectrum. Laboratory work will emphasize digital image processing of the surface environment using state-of-the-art image-analysis software. Two hours of lecture and one four-hour laboratory weekly.

EASC 485  Contaminant Hydrogeology (3 credits)
Prerequisite: EASC 240; and CHEM 132 or CHEM 142
The fate and transport of groundwater contaminants in various hydrogeologic regimes are presented in this course. Methods for conducting hydrogeologic investigations are discussed in detail. (Formerly EASC 440) May be taken for graduate-level credit.

EASC 490  Field Methods in Geology (4 credits)
Prerequisite: EASC 350 and EASC 360
In this course, basic field techniques used by geologists to create geologic maps are introduced. An emphasis will be placed on the collection, processing, and interpretation of field data collected from study areas in Massachusetts and Rhode Island. Students will be required to write formal geologic reports involving maps, cross-sections and supporting data. Two hours of lecture and one four-hour laboratory weekly. Spring semester.

EASC 495  Research Methods in Geology (3 credits)
Prerequisite: Consent of instructor
In this course, students work as a research group on a semester-long project in the faculty member's geological sub-discipline. Students will perform an extensive literature review, develop the methodology to answer the research question, participate in data collection and analysis, and communicate the research findings to the department and the wider university community. The opportunity also exists to present the research findings at a professional conference or in a scientific journal publication depending on the quality and significance of the results.
EASC 496  Seminar in Geology (1 credit each semester)
Prerequisite: Senior standing in geology, earth science or chemistry/geology
This course focuses on the development of thought concerning current global models and/or continuing controversies in geology. One credit will be earned per semester for a total of two credits to be awarded at the end of the second semester. Fall semester. May be taken for graduate-level credit.

EASC 497  Research in Earth Science (1-3 credits)
Prerequisite: Consent of instructor
In this course, students work independently on a research project in consultation with a faculty mentor. The project may be designed solely by the student or through discussions with the faculty mentor and culminates with a research paper. The course is intended for more advanced students who have completed course work related to the research project. This course may be repeated for up to six credits. Either semester.

EASC 498  Internship in Earth Science (3-6 credits)
Prerequisite: Consent of the department; formal application required
This course provides an opportunity for earth science majors to gain practical job experience in some aspects of earth/environmental science. Possible internships include positions in local, state and federal agencies as well as private corporations and consulting firms. This course may be repeated for a maximum of six credits. Either semester.

EASC 499  Directed Study in Earth Science (1-3 credits)
Prerequisite: Consent of the department; formal application required
Directed study is open to juniors and seniors who have demonstrated critical and analytical abilities in their studies and who wish to pursue a project independently. This course may be taken twice for a maximum of six credits. Offered either semester.

EASC 560  Special Topics in Earth Science (variable credit)
This course will cover special topics of current relevance in earth science education. The topic to be addressed will be announced prior to registration. May be taken more than once with the consent of the adviser.

Earth Sciences: Other Approved Courses

EASC 300  Excursions in Geology (3-6 credits)
Prerequisite: Consent of instructor
Preliminary lectures on a study area followed by one to six weeks of interdisciplinary field study leading to a final report are included in this course. Travel and living expenses will be borne by the student. The study areas will be in the western U.S. or foreign countries such as Canada, Mexico, Ireland or Greece. This course is of interest to anthropology, biology and geography majors as well as other students.

EASC 315  Computer Applications in Earth Science
EASC 400  Earth Systems Science I
EASC 410  Earth Systems Science II
EASC 501  Observational Astronomy
EASC 502  Research
EASC 503  Directed Study
EASC 504  Observational Meteorology
EASC 550  Modern Developments in Earth Science

- ECONOMICS

ECON 101  Principles of Microeconomics (3 credits)
This course focuses on the theory and application of utility and demand, production, cost and market analysis. Either semester. (CSOC)

ECON 102  Principles of Macroeconomics (3 credits)
This course focuses on the theory and application of the following: national income analysis and determination, fiscal policy, monetary theory and policy and the Federal Reserve System. Either semester. (CSOC)
ECON 199  First Year Seminar (3 credits)
Prerequisite: Open to all freshmen with a writing placement score of 3 or above or a SAT score of 500 or above or who have completed ENGL 101. Students with 24 or more transfer credits will have this requirement waived.
First Year Seminars (FYS) are writing-intensive, topic courses that introduce students to academic thought, discourse and practices. FYS courses prepare and orient students toward productive and fulfilling college careers by actively engaging them in a specific academic area of interest. Students will improve their writing, reading, research and basic information and technology skills while learning to work both collaboratively and independently. These courses will fulfill the First Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one FYS course may be taken for credit. (CFYS)

ECON 201  Intermediate Microeconomic Theory and Policy (3 credits)
Prerequisite: ECON 101 and ECON 102; or consent of instructor
The theory of consumer behavior and demand, production and cost, the firm and market organization are discussed in this course with emphasis placed on practical applications. Either semester.

ECON 205  Intermediate Macroeconomic Theory and Policy (3 credits)
Prerequisite: ECON 101 and ECON 102; or consent of instructor
A number of macroeconomic models are developed in this course, including the Keynesian, monetarist and rational expectations models. Economic theory is used to explore the nature and causes of business fluctuations and the desirability of various government policies. Either semester.

ECON 210  Statistics for Economics and Business (3 credits)
This course will provide students with an understanding of statistics and the ability to present and describe information, draw conclusions about large populations based on measures from sample data, calculate critical z or t statistics to perform hypothesis tests and apply statistical methods to business and economic issues. (CQUR)

ECON 298  Second Year Seminar (Speaking Intensive) (3 credits)
Prerequisite: _ _ _ _ 199; Open to all sophomores and juniors who have completed ENGL 101, and the speaking skills requirement. Students with 54 or more transfer credits will have this requirement waived. Cannot be taken if _ _ _ _ 299 is taken for credit. Second Year Seminars (SYS) are speaking-intensive, topic courses that build on the academic skills and habits introduced in the First Year Seminar. SYS courses engage students in a specific academic area of interest and provide them with the opportunity to reinforce, share and interpret knowledge. Students will improve their speaking, reading, research and basic information and technology skills while building the connections between scholarship and action that are required for lifelong learning. These courses will fulfill the Second Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one SYS course may be taken for credit. (CSYS)

ECON 299  Second Year Seminar (Writing Intensive) (3 credits)
Prerequisite: _ _ _ _ 199; Open to all sophomores and juniors who have completed ENGL 101 and ENGL 102. Students with 54 or more transfer credits will have this requirement waived. Cannot be taken if _ _ _ _ 298 is taken for credit. Second Year Seminars (SYS) are writing-intensive, topic courses that build on the academic skills and habits introduced in the First Year Seminar. SYS courses engage students in a specific academic area of interest and provide them with the opportunity to reinforce, share and interpret knowledge. Students will improve their writing, reading, research and basic information and technology skills while building the connections between scholarship and action that are required for lifelong learning. These courses will fulfill the Second Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one SYS course may be taken for credit. (CSYS)

ECON 301  Industrial Organization (3 credits)
Prerequisite: ECON 101 and ECON 102; or consent of instructor
This course provides an analysis of the structure, conduct and performance of industries. Topics discussed include causes and measurement of market concentration, strategic behavior of firms and the development of public policies, such as antitrust and regulation, that affect business.

ECON 302  The Canadian Economy: A Comparative Approach (3 credits)
Prerequisite: ECON 101 and ECON 102; or consent of instructor
This course is an undergraduate introduction to the Canadian economy. It will provide the student with a brief, comparative overview of the size and structure of the Canadian and American economies, a close look at how the Canadian economy evolved from a resource to a modern industrial economy and a detailed study of the structure and institutions which make up the Canadian economy.

ECON 315  Money and Banking (3 credits)
Prerequisite: ECON 101 and ECON 102; or consent of instructor
The roles and functions of money and the banking system are discussed in this course. Various monetary theories and the influence of monetary policy on the state of the economy are examined. Fall and spring semester.

ECON 320 Comparative Economics (3 credits)
Prerequisite: ECON 101 and ECON 102
This course compares different economic systems that have arisen as the world economy has evolved and alliances have been formed over time. There is a strong emphasis on exploring the current and historical implications of different economic philosophies, particularly with reference to NAFTA economies: Canada, U.S.A. and Mexico. Topics include globalization, international economic organizations, economic integration, economic policy making, health care, labor migration, resource use and environmental issues.

ECON 321 International Economics (3 credits)
Prerequisite: ECON 101 and ECON 102; or consent of instructor
Pure trade theory and its application to solving policy problems are covered in this course. Topics studied include balance of trade, balance of payments and monetary systems.

ECON 325 The Economy of Crime (3 credits)
Prerequisite: ECON 101 and ECON 102; or consent of instructor
The topics covered by this course include the theoretical and empirical analysis of the economic causes of criminal behavior, the social costs of crime and its prevention and the design of law enforcement policies.

ECON 331 Public Economics (3 credits)
Prerequisite: ECON 101 or ECON 102
Government intervention changes opportunities and incentives for individuals, families, businesses, and state and local governments. This course will provide students with an understanding of the reasons for and consequences of government intervention and policies. It combines public finance, which is how the government allocates resources, and public choice, which reflects the political decisions of voters and their elected representatives. We will apply economic tools to analyze public policy issues such as government intervention in combating environmental pollution, the introduction of education vouchers, the contours of health care and social security reforms, among others.

ECON 340 Law and Economics (3 credits)
Prerequisite: ECON 101
This course examines the economic basis for legal decisions. Microeconomic theory is combined with an analysis of the law, with particular emphasis on case studies. Topics covered include the problems of defining property rights and the economics of tort, contract and criminal law.

ECON 350 Urban Economic Problems and Policies (3 credits)
Prerequisite: ECON 101 and ECON 102 or consent of instructor
The economic aspects of selected urban problems such as housing, poverty, transportation, crime and the urban environment are analyzed in this course. Public policies relating to these problems are discussed.

ECON 360 Environmental Economics (3 credits)
Prerequisite: ECON 101 and ECON 102 or consent of instructor
This course analyzes the economics of environmental issues and natural resource use. Topics include allocation of renewable, non-renewable and common property resources, external cost/benefit analysis and public goods. Also included is the “ecological economics” approach, which incorporates an analysis of the physical requirements for ecological sustainability.

ECON 375 Labor Economics (3 credits)
Prerequisite: ECON 101 and ECON 102; or consent of instructor
This course analyzes the determination of wages and employment in the labor market. Applications of the theory include unemployment, discrimination, safety in the workplace and unions. Effects of government policies, such as comparable worth, affirmative action and health and safety regulations, are examined.

ECON 377 Sports Economics (3 credits)
Prerequisite: ECON 101
This course explores a variety of economic issues relating to professional team sports, collegiate and amateur sports such as football, baseball, hockey, tennis, skiing and golf. Students will examine ticket prices, player salaries and the profitability of team franchises. They will also study facility design and game-day transportation issues, and why the economic impact of sports facilities is often used to justify government subsidies.
ECON 400  History of Economic Thought (3 credits)  
Prerequisite: ECON 101 and ECON 102  
This course is an overview of the development of economic theory, which is presented in a historical context. The ideas of many important contributors to economic thought will be studied including those of Adam Smith, Karl Marx and John Maynard Keynes. May be taken for graduate-level credit.

ECON 410  Mathematical Economics I (3 credits)  
Prerequisite: MATH 141 and MATH 142 and MATH 120 and ECON 101 and ECON 102; or consent of instructor  
This course provides training in the use of calculus and other mathematical tools in comparative static analysis and the solving of optimization problems in economics. May be taken for graduate-level credit.

ECON 420  Econometrics I (3 credits)  
Prerequisite: MATH 141, MATH 142, ECON 101, ECON 102; MATH 120 or ECON 410 and ECON 411; or consent of instructor  
This course is an introduction to the methods of econometrics, including the two variable linear models, the generalized least squares estimator and auto-correlation.

ECON 430  Managerial Economics (3 credits)  
Prerequisite: ECON 205 and ECON 210; or consent of instructor  
This course emphasizes the practical applications of micro- and macroeconomic skills to real-life problems. Quantitative tools and case studies will be used to understand topics including demand, cost and output, and pricing decisions in various market structures. May be taken for graduate-level credit.

ECON 498  Internship in Economics (3-15 credits)  
Prerequisite: Consent of department chairperson; formal application required  
This course is a non-classroom experience designed for a limited number of junior and senior majors to complement their academic preparation. This course may be repeated for a maximum of 15 credits. Either semester.

ECON 499  Directed Study in Economics (1-3 credits)  
Prerequisite: Consent of department chairperson; formal application required  
Directed study is open to juniors and seniors who have demonstrated critical and analytical abilities in their studies may pursue an independent project under a faculty member's supervision. This course may be taken twice for a maximum of six credits. Offered either semester.

ECON 500  Foundations of Economics (3 credits)  
This course presents a study of basic economic principles, participants' behavior and structure of the macro economy. Basic principles covered include opportunity cost and market mechanism. The microeconomic segment focuses on consumer and firm behavior, resource markets and market failures. Macroeconomics aggregate topics contain economic models, and discretionary policy and its implications. This course will help enhance understanding and awareness of household, business, national and international economic affairs.

ECON 501  Foundations of Business Statistics (3 credits)  
This course is an introduction to the concepts of statistics, with applications in business and economic analysis. Specific techniques covered include descriptive statistics, probability, statistical inference, hypothesis testing, correlation and regression.

ECON 502  Research (3 or 6 credits)  
Prerequisite: Consent of the department chairperson; formal application required  
This course consists of original research undertaken by graduate students in their field of interest under the sponsorship of a faculty adviser. For details, consult the paragraph titled "Directed or Independent Study" in the "College of Graduate Studies" section of this catalog. This course may be repeated for a maximum of six credits.

ECON 503  Directed Study (1-3 credits)  
Prerequisite: Consent of the department chairperson; formal application required  
Directed study is designed for the graduate student who desires to study selected topics in a specific field of interest under the direction of a faculty adviser. For details, consult the paragraph titled "Directed or Independent Study" in the "College of Graduate Studies" section of this catalog. This course may be repeated for a maximum of six credits.

ECON 550  Managerial Economics (1.5 credits)  
Prerequisite: ECON 500 and ECON 501  
This course studies the application of the analytical constructs of economic theory to practical problems faced by a firm and its representatives. Topics include demand analysis, production and cost analysis, market and pricing analysis, capital budgeting and government policy.
ECON 560  Special Topics in Economics (1-3 credits)
In this course, special topics of current relevance in economics will be offered from time to time. The topic to be addressed will be announced prior to registration. May be taken more than once with the consent of the adviser.

EDUCATION (HIGH SCHOOL, MIDDLE SCHOOL, PREK-12)

EDHМ 199  First Year Seminar (3 credits)
Prerequisite: Open to all freshmen with a writing placement score of 3 or above or a SAT score of 500 or above or who have completed ENGL 101. Students with 24 or more transfer credits will have this requirement waived.
First Year Seminars (FYS) are writing-intensive, topic courses that introduce students to academic thought, discourse and practices. FYS courses prepare and orient students toward productive and fulfilling college careers by actively engaging them in a specific academic area of interest. Students will improve their writing, reading, research and basic information and technology skills while learning to work both collaboratively and independently. These courses will fulfill the First Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one FYS course may be taken for credit. (CFYS)

EDHМ 210  Introduction to Teaching (3 credits)
Prospective candidates for teaching careers explore the teaching learning process in schools by examining the College of Education and Allied Studies Conceptual Framework Model and by reading, writing and analyzing research materials, by using technology, observing in the field, and by planning learning experiences. Candidates gain knowledge and experience concerning diversity, differentiated learning, special education, the Massachusetts Curriculum Frameworks, and the organizational structure of schools. Professional responsibilities, ethics, and legal aspects concerning education are also identified. Candidates will begin to develop their first portfolios as a professional in education. Field Experience: 20 hours in appropriate settings. Addenda: This course has been changed effective spring 2012. See the Catalog Addenda section of this publication for detailed information.

EDHМ 235  Learning and Motivation (3 credits)
Candidates for teaching careers will investigate contemporary psychological theories of learning and motivation as they relate to instructional strategies, classroom management and the exigencies of public school teaching. Emphasis will be placed on the practical application of research-supported constructivist principles that promote authentic learning in the increasingly diverse classroom of the 21st century. Candidates will continue to develop their professional portfolios. Field Experience: 20 hours in appropriate settings. Addenda: This course has been changed effective spring 2012. See the Catalog Addenda section of this publication for detailed information.

EDHМ 298  Second Year Seminar (Speaking Intensive) (3 credits)
Prerequisite: _ _ _ _ 199; Open to all sophomores and juniors who have completed ENGL 101, and the speaking skills requirement. Students with 54 or more transfer credits will have this requirement waived. Cannot be taken if _ _ _ _ 299 is taken for credit.
Second Year Seminars (SYS) are speaking-intensive, topic courses that build on the academic skills and habits introduced in the First Year Seminar. SYS courses engage students in a specific academic area of interest and provide them with the opportunity to reinforce, share and interpret knowledge. Students will improve their speaking, reading, research and basic information and technology skills while building the connections between scholarship and action that are required for lifelong learning. These courses will fulfill the Second Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one SYS course may be taken for credit. (CSYS)

EDHМ 299  Second Year Seminar (Writing Intensive) (3 credits)
Prerequisite: _ _ _ _ 199; Open to all sophomores and juniors who have completed ENGL 101 and ENGL 102. Students with 54 or more transfer credits will have this requirement waived. Cannot be taken if _ _ _ _ 298 is taken for credit.
Second Year Seminars (SYS) are writing-intensive, topic courses that build on the academic skills and habits introduced in the First Year Seminar. SYS courses engage students in a specific academic area of interest and provide them with the opportunity to reinforce, share and interpret knowledge. Students will improve their writing, reading, research and basic information and technology skills while building the connections between scholarship and action that are required for lifelong learning. These courses will fulfill the Second Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one SYS course may be taken for credit. (CSYS)

EDHМ 335  Assessment and Planning (3 credits)
Prerequisite: EDHМ 210 and EDHМ 235 and admission to the Professional Education Program
This course is designed to enable candidates for teaching careers to understand and practice curriculum design, plan for instruction at a
deeper level (than the introductory course), and build on assessment to include standardized testing, portfolios and authentic assessment. The students will work collaboratively and individually to create and deepen their professional knowledge of teaching pedagogy. Candidates will continue to develop their professional portfolios. Field Experience: 20 hours in appropriate settings.

EDHM 413 Strategies for Teaching – Music (3 credits)
Prerequisite: EDHM 210 and EDHM 235 and EDHM 335 and admission to the Professional Education Program
Strategies, including methods, materials and media for teaching are studied. Developing competency and versatility is stressed through simulations and guided teaching in area schools. Also see HSED and MSED

EDHM 424 Strategies for Teaching - Foreign Language (3 credits)
Prerequisite: EDHM 210 and EDHM 235 and EDHM 335 and LANG 324 and admission to the Professional Education Program
Strategies, including methods, materials and media for teaching are studied. Developing competency and versatility is stressed through simulations and guided teaching in area schools. Also see HSED and MSED

EDHM 425 Strategies for Teaching - Visual Art – High School (3 credits)
Prerequisite: EDHM 210 and EDHM 235 and EDHM 335 and admission to the Professional Education Program
Strategies, including methods, materials and media for teaching are studied. Developing competency and versatility is stressed through simulations and guided teaching in area schools. Also see HSED and MSED

EDHM 445 Content Area Reading, Writing and Study Skills (3 credits)
Prerequisite: EDHM 210 and EDHM 235 and EDHM 335 and admission to the Professional Education Program
Students will learn how to teach reading, writing and study skills in their content area. Furthermore, they will understand how to develop their students’ critical thinking and problem solving skills. Technology is emphasized.

EDHM 459 Strategies for Teaching - Visual Art – Middle School (3 credits)
Prerequisite: EDHM 210 and EDHM 235 and EDHM 335 and admission to the Professional Education Program
Strategies, including methods, materials and media for teaching are studied. Developing competency and versatility is stressed through simulations and guided teaching in area schools. Also see HSED and MSED

EDHM 490 Teaching Practicum (12 credits)
Cross Listed with EDHM 495
Prerequisite: Acceptance and good standing in the professional education program
Prospective teacher candidates are assigned appropriate student teaching stations where they work in an approved situation under an experienced supervising teacher or as a teacher of record. This is practical experience for one semester in a public school where teacher candidates are functioning as professional teachers in order to meet Massachusetts professional standards for teachers.

EDHM 495 Teaching Practicum (12 credits)
Cross Listed with EDHM 490
Prerequisite: Acceptance and good standing in the professional education program
Prospective teacher candidates are assigned appropriate student teaching stations where they work in an approved situation under an experienced supervising teacher or as a teacher of record. This is practical experience for one semester in a public school where teacher candidates are functioning as professional teachers in order to meet Massachusetts professional standards for teachers.

EDHM 499 Directed Study (1-3 credits)
Prerequisite: Consent of department; formal application required
Directed study is open to juniors, seniors and postbaccalaureate students who have demonstrated critical and analytical abilities in their studies and who wish to pursue a project independently. This course may be taken twice for a maximum of six credits. The adviser's permission is required.

EDHM 503 Directed Study (1-3 credits)
Prerequisite: Consent of the department; formal application required
Directed study is designed for the graduate student who desires to study selected topics in a specific field. For details, consult the paragraph titled “Directed or Independent Study” in the “College of Graduate Studies” section of this catalog. This course may be repeated for a maximum of six credits.

EDHM 554 Student Teaching Practicum (6 credits)
Prerequisite: EDHM 550; and EDHM 552 or EDHM 553
Graduate students are assigned appropriate student teaching stations where they work in approved situation under an experienced supervising teacher. This is a practical experience for one semester in a public school where student teachers are functioning professional teachers. A university supervisor visits to assist the student teacher. Seminars may be held to exchange experiences. Students are
expected to carry a minimum responsible teaching load equal to 50% of the regular teacher's assignment. **Full-time for one semester. Either semester.**

**EDHM 556  Employment-Based Practicum (6 credits)**
*Prerequisite: EDHM 550; and EDHM 552 or EDHM 553*
A minimum of 300 clock hours will be required in an 8-12 grade setting as a high school teacher. The experience must be less than full-time but at least one-fifth time employment in the role for which licensure will be sought. Request for this course must be made to the department and the student teaching office.

**EDHM 560  Special Topics (variable credit)**
*Prerequisite: Course prerequisites may be specified depending on the nature of the topic*
Special topics of current relevance in education will be offered from time to time. The topic to be addressed will be announced prior to registration. The course may be taken more than once.

**EDHM 571  Teaching and Learning in Middle and High Schools (3 credits)**
This course focuses on differentiated instruction, learning styles, management of a classroom, and the use of technology. Other topics will include special education, English language learners and adolescent psychology. Mock lessons will be performed and 20 observation hours are required.

**EDHM 572  Planning and Assessment in Middle and High Schools (3 credits)**
*Prerequisite: EDHM 571 which may be taken concurrently*
This course focuses on lesson and unit planning connected to frameworks and standards, varied types of assessment including standardized assessment, performance assessment, formal and informal assessment, and formative and summative assessment.

**EDHM 573  Issues and Foundations in Middle and High Schools (3 credits)**
*Prerequisite: EDHM 571 which may be taken concurrently*
This course focuses on current issues, and policies in education and their origins. Particular attention will be paid to public policy and the impact on today's classroom. Communication with parents, administrators and colleagues will also be a focus of this course.

- **EDUCATION (HIGH SCHOOL, MIDDLE SCHOOL, PREK-12): OTHER APPROVED COURSES**

**EDHM 550  Middle and High School Theory into Practice (3 credits)**
*Prerequisite: Admission to Accelerated Postbaccalaureate Program*
This course will focus on the philosophical and psychological foundations of secondary education with an emphasis on connecting learning theory to best practice. Developing competencies for effective, understandable and appropriate modes of communication in teaching is stressed through microteaching and other simulations. Emphasis is also placed on understanding the contemporary middle and high school, to include but not be limited to various organizational structures, curricula and teacher roles. 40 hours of fieldwork are required.

**EDHM 552  Curriculum and Instruction in Middle and High School Mathematics and Science (3 credits)**
*Prerequisite: EDHM 550 which may be taken concurrently*
In this course research and best practice in mathematics and science will be studied in relation to national standards and State Curriculum Frameworks. Multiple perspectives including diversity will be considered as critical factors in curriculum and instruction. Outcomes will focus on the nature of the discipline and what to teach, how to teach and how to assess in a learning-centered classroom. Science licensure candidates complete three online modules and exams.

**EDHM 553  Curriculum and Instruction in Middle and High School Arts and Humanities (3 credits)**
*Prerequisite: EDHM 550 which may be taken concurrently*
In this course, research and best practice in the arts and humanities will be studied in relation to national standards and State Curriculum Frameworks. Multiple perspectives including diversity will be considered as critical factors in curriculum and instruction. Outcomes will focus on the nature of the disciplines and what to teach, and how to assess in a learning-centered classroom.

**EDHM 558  The Reflective Middle and High School Practitioner (3 credits)**
*Prerequisite: EDHM 550; and EDHM 552 or EDHM 553.*
This capstone course focuses on the candidates meeting all of the competencies needed for Massachusetts Initial Licensure for teaching. In this experience they will closely examine their own classroom learning and teaching practices that are consistent with the constructivist theory of learning. They will reflect upon and demonstrate their knowledge of the best practices that address high standards and expectations, effective instruction, assessment and classroom management. Each candidate for Initial Licensure will complete his/her
professional portfolio that clearly provides the evidence of achievement of the required performance outcomes. Note: This course may be taken concurrently with EDHM 554 or EDHM 556.

**EDUCATION - MASTER'S CORE**

**EDMC 503**  Directed Study (1-3 credits)
*Prerequisite: Consent of the department; formal application required*
Directed study is designed for the graduate student who desires to study selected topics in a specific field. For details, consult the paragraph titled “Directed or Independent Study” in the “College of Graduate Studies” section of this catalog. This course may be repeated for a maximum of six credits.

**EDMC 530**  The Teacher as Researcher (3 credits)
This course is designed to provide graduate students in education with an introduction to the research process. Emphasis will be placed upon acquiring pragmatic skills that can be used throughout one's career. Students will be expected to read and interpret statistical parts of published research but not to be expected to run statistical programs. The course will stress the development of skills required for the critical evaluation of current research studies. Students are expected to become informed and critical consumers of research literature and become familiar with the methods and technology surrounding scientific inquiry.

**EDMC 531**  The Standards-Based Classroom: Curriculum (3 credits)
This course focuses on constructivism and other key theories, educational foundations and concepts of curriculum design, development, and program evaluation in relation to national standards and the Massachusetts Frameworks. Curriculum issues and classroom applications will be studied in detail as well. As a final experience, students will work independently and collaboratively to present and defend a curriculum unit that is relevant to their area of licensure.

**EDMC 532**  The Teacher as Leader: From Issues to Advocacy (3 credits)
This course addresses the critical social, economic, political and sociocultural issues challenging educators and society today. Issues are examined from a variety of vantage points, including theoretical underpinnings, research findings and the position taken by professional organizations. Students are expected to articulate a personal position on critical issues and to practice school leadership and community advocacy on issues of concern.

**EDMC 533**  The Standards-Based Classroom: Instruction and Assessment for Diverse Learners (3 credits)
This course focuses on effective, differentiated instruction as well as on the purposes of educational assessment, both formal and informal. Current trends in instructional strategies and assessment as related to diverse learners and to effective classroom management will be examined in detail.

**EDMC 538**  The Professional Teacher (3 credits)
*Prerequisite: EDMC 530 and EDMC 531 and EDMC 532 and EDMC 533*
This course is designed to be the capstone course taken at the end of the student's program. This course addresses the changing context of teaching in view of the Bridgewater State University Conceptual Framework, mentoring, peer coaching and the national standards for professional teachers. Students will analyze the impact of educational reform efforts aimed at improving the teaching, learning and professional development of teachers in the educational environment. Reflective practice and written communication are key components of the course.

**EDUCATIONAL LEADERSHIP**

**EDLE 502**  Research (3 or 6 credits)
*Prerequisite: Consent of the department; formal application required*
Original research undertaken by the graduate student in their field. For details, consult the paragraph titled “Directed or Independent Study” in the “College of Graduate Studies” section of this catalog. This course may be repeated for a maximum of six credits.

**EDLE 503**  Directed Study (1-3 credits)
*Prerequisite: Consent of the department; formal application required*
Directed study is designed for the graduate student who desires to study selected topics in a specific field. For details, consult the
EDLE 509  Seminar for Future Leaders (3 credits)
This course is the first in the accelerated licensure program in educational leadership. In the course, students will complete a portfolio in order to determine the number of credits (up to nine) that will be waived based on documentation presented to the Practitioner Panel. A maximum of two courses and half of the practicum can be waived based on prior leadership experience.

EDLE 510  Seminar on Educational Leadership for the Future (3 credits)
This is the first course in the MEd program in educational leadership. As an introductory course, a primary goal is to introduce students to major concepts, theories and ideas that are developed in depth in subsequent leadership courses. These include leadership theory applied to the educational setting, the nature of organizations, and key leadership skills such as decision-making, team building, empowering others and fostering collaboration. Students are exposed to study of the change process, the dynamics of effective group process and ethical issues of school leadership. Students will also be introduced to the MEd program itself and encouraged to reflect on the challenges of being an educational leader and how this prospect fits their personal vision statement of their career and professional growth plans. Finally, MEd and LEAD students will begin the development of the electronic leadership portfolio, which is an exit requirement for administrator licensure and the master's degree comprehensive exams in educational leadership.

EDLE 511  Educational Leadership and Managerial Effectiveness (3 credits)
Prerequisite: EDLE 510
This course is designed to introduce prospective school leaders to the theory and practice of systems thinking as it is applied to organizational planning and development issues. School leaders need to know how to assess needs, establish priorities, set goals, allocate resources and develop and implement strategic plans in order to facilitate effective educational programs and practices. As important, they need to develop the ability to involve others in the development, planning and implementation phases of school improvement efforts. Major topics include systems thinking (concepts and strategies) and the principles of total quality management (TQM) applied to the educational setting. The course also examines recent research on key topics.

EDLE 513  Special Topics in Educational Administration (1-3 credits)
Prerequisite: At least nine hours in educational administration or consent of the instructor. Additional prerequisites may be specified depending upon the nature of the topic.
Selected and timely topics in the various fields of emphasis pertaining to educational administration. The topics to be addressed will be announced prior to registration. May be taken more than once with the consent of the adviser.

EDLE 530  Research Applications for School Leaders (3 credits)
Prerequisite: EDLE 510
Future school leaders need to develop a solid foundation of understanding of the role of research in guiding and informing administrative practice and the habits of mind that foster inquiry and the active pursuit of school improvement. In this course students will study the major concepts and strands of research methodology and their applications in the school setting. They will also learn to become skilled consumers of educational research by reviewing and critiquing current research reports involving school organizational and leadership issues. Finally, each student will develop a research proposal in a formal paper.

EDLE 535  Supervision in Action for Cooperating Teachers (3 credits)
Prerequisite: Consent of department chairperson
This course provides preparation and support for cooperating teachers, who are faculty members of local school districts. Each person who is enrolled in the course has a Bridgewater State University student teacher. Cooperating teachers will learn various tools to observe their student teachers in the classroom. Course participants will learn how to plan and conduct pre-observation and post-observation conferences. In addition, cooperating teachers will study the problems and issues facing beginning teachers in culturally diverse classrooms.

EDLE 561  Elementary School Administration (3 credits)
Prerequisite: EDLE 510
The application of general principles of school administration to the specific problems of the elementary school. Emphasis is on curriculum development and program evaluation; personnel supervision and evaluation; goal setting, establishing priorities, allocating resources, facilitating the educational process in response to the needs of learners, teachers and the community; school law; budgeting; plant management; community education; human concerns including dealing in an equitable, sensitive and responsive manner with students, teachers, parents and the community.

EDLE 562  High School Administration (3 credits)
Prerequisite: EDLE 510
The application of general principles of school administration to the specific problems of the high school. Emphasis is on curriculum
development and program evaluation; personnel supervision and evaluation; goal setting, establishing priorities, allocating resources, facilitating the educational process in response to the needs of learners, teachers and the community; school law; budgeting; plant management; community education; human concerns including dealing in an equitable, sensitive and responsive manner with students, teachers, parents and the community.

EDLE 563 Middle School Administration (3 credits)
Prerequisite: EDLE 510
The application of general principles of school administration to the specific problems of the middle school. Emphasis is on curriculum development and program evaluation; personnel supervision and evaluation; goal setting, establishing priorities, allocating resources, facilitating the educational process in response to the needs of learners, teachers and the community; school law; budgeting; plant management; community education; human concerns including dealing in an equitable, sensitive and responsive manner with students, teachers, parents and the community.

EDLE 564 Selection and Development of Educational Personnel (3 credits)
Prerequisite: EDLE 510
Staff selection and development will be studied including theories and techniques of supervision, evaluative procedures to assess the effectiveness of programs and personnel, organizational characteristics of schools and strategies for institutional change, in-service education and personnel and program planning.

EDLE 565 School Finance and Business Administration (3 credits)
Prerequisite: EDLE 510
A study of the financial support for public schools from local, state and federal governments. Fiscal planning, budgeting, plant management, state and municipal financing, accounting and purchasing procedures, distribution of supplies and services, transportation and food service will receive attention.

EDLE 567 Human Concerns in the Schools (3 credits)
A study of theory, research and practice in the area of human relations in the school including public relations; clear and appropriate communication; and equitable, sensitive and responsive relations with students, teachers, parents and the community.

EDLE 569 Legal Aspects of School Administration (3 credits)
Prerequisite: EDLE 510
Legal rights, duties and liabilities of school personnel in general relationship to the school committee in Massachusetts will be studied. Intended for administrators, prospective administrators and classroom teachers interested in the legal aspects of school committees, school property, teaching contracts, labor relations and collective bargaining, tenure, prevention of injury and accidents to students, relationships with parents and a general survey of educational law cases at the local, state and national levels.

EDLE 572 Technology for School Administrators (3 credits)
Prerequisite: EDLE 510
New administrative software will be reviewed as each student becomes proficient in the use of a microcomputer. Students will also become familiar with educational uses of interactive television, videodisk and hypercard. Distance learning and cooperative projects will also be addressed.

EDLE 578 Curriculum Improvement (3 credits)
Prerequisite: EDLE 510
Contemporary theories of curriculum design and evaluation are explored. Students are expected to develop an eclectic approach to curriculum improvement based upon those theories and upon contemporary organizational factors, including leadership and management. Material is presented relating to developing community education programs and to personnel and program planning.

EDLE 579 Diversity Issues for School Leaders (3 credits)
Prerequisite: EDLE 510
This course is designed to assist in the focusing of school administrators and leaders on issues of diversity and assessing how these issues will impact the total school community.

EDLE 580 Practicum in Administration of Special Education (3 or 6 credits)
Prerequisite: Consent of department; formal application required
Students enrolled in a practicum for three credits must complete 200 hours of fieldwork. Those students enrolled in six credits of practicum must complete 400 hours of fieldwork. Students will be required to meet national competencies. Information outlining these competencies will be distributed at an orientation meeting. The practicum is jointly supervised by a university supervisor and a cooperating practitioner. This course may be repeated once for a maximum of six credit hours.
EDLE 582  Practicum in School Business Administration (3 or 6 credits)
Prerequisite: Consent of department; formal application required
Students enrolled in a practicum for three credits must complete 200 hours of fieldwork. Those students enrolled in six credits of practicum must complete 400 hours of fieldwork. Students will be required to meet national competencies. Information outlining these competencies will be distributed at an orientation meeting. The practicum is jointly supervised by a university supervisor and a cooperating practitioner. This course may be repeated once for a maximum of six credit hours.

EDLE 583  Practicum in Supervisorship/Directorship (3 or 6 credits)
Prerequisite: Consent of department; formal application required
Students enrolled in a practicum for three credits must complete 200 hours of fieldwork. Those students enrolled in six credits of practicum must complete 400 hours of fieldwork. Students will be required to meet national competencies. Information outlining these competencies will be distributed at an orientation meeting. The practicum is jointly supervised by a university supervisor and a cooperating practitioner. This course may be repeated once for a maximum of six credit hours.

EDLE 584  Practicum in Elementary School Principalship (3 or 6 credits)
Prerequisite: Consent of department; formal application required
Students enrolled in a practicum for three credits must complete 200 hours of fieldwork. Those students enrolled in six credits of practicum must complete 400 hours of fieldwork. Students will be required to meet national competencies. Information outlining these competencies will be distributed at an orientation meeting. The practicum is jointly supervised by a university supervisor and a cooperating practitioner. This course may be repeated once for a maximum of six credit hours.

EDLE 585  Practicum in Middle School Principalship (3 or 6 credits)
Prerequisite: Consent of department; formal application required
Students enrolled in a practicum for three credits must complete 200 hours of fieldwork. Those students enrolled in six credits of practicum must complete 400 hours of fieldwork. Students will be required to meet national competencies. Information outlining these competencies will be distributed at an orientation meeting. The practicum is jointly supervised by a university supervisor and a cooperating practitioner. This course may be repeated once for a maximum of six credit hours.

EDLE 586  Practicum in High School Principalship (3 or 6 credits)
Prerequisite: Consent of department; formal application required
Students enrolled in a practicum for three credits must complete 200 hours of fieldwork. Those students enrolled in six credits of practicum must complete 400 hours of fieldwork. Students will be required to meet national competencies. Information outlining these competencies will be distributed at an orientation meeting. The practicum is jointly supervised by a university supervisor and a cooperating practitioner. This course may be repeated once for a maximum of six credit hours.

EDLE 587  Practicum in Superintendency/Assistant Superintendency (3 or 6 credits)
Prerequisite: Consent of department; formal application required
Students enrolled in a practicum for three credits must complete 200 hours of fieldwork. Those students enrolled in six credits of practicum must complete 400 hours of fieldwork. Students will be required to meet national competencies. Information outlining these competencies will be distributed at an orientation meeting. The practicum is jointly supervised by a university supervisor and a cooperating practitioner. This course may be repeated once for a maximum of six credit hours.

EDLE 591  Seminar in School Administration: The Superintendency (3 credits)
Examination of major issues and problems confronting school superintendents. Students will be expected to study the relevant literature pertaining to school administration and prepare scholarly papers for class presentation.

EDLE 603  Directed Study in School Administration (3 credits)
Prerequisite: EDLE 670 and consent of the department; formal application required
Designed for the graduate student who desires to study selected topics in a specific field. For details, consult the paragraph entitled “Directed or Independent Study” in the “School of Graduate Studies” section of this catalog.

EDLE 661  Effective School Leadership for Elementary Schools (3 credits)
Prerequisite: EDLE 670; course restricted to cohort members
This course addresses principles of effective leadership and management for elementary schools. Emphasis is on the role of the principal as an instructional leader and manager of change. Specific topics include goal setting, site-based management and team leadership as well as operational issues involving plant management, scheduling and fiscal administration.

EDLE 662  Effective School Leadership for Middle Schools (3 credits)
Prerequisite: EDLE 670; course restricted to cohort members
This course addresses principles of effective leadership and management for middle schools. Emphasis is on the role of the principal as an
EDLE 663  Effective School Leadership for High Schools (3 credits)  
*Prerequisite: EDLE 670; course restricted to cohort members*  
This course addresses principles of effective leadership and management for high schools. Emphasis is on the role of the principal as an instructional leader and manager of change. Specific topics include goal setting, site-based management and team leadership as well as operational issues involving plant management, scheduling and fiscal administration.

EDLE 664  The Personnel Function of Public Schools (3 credits)  
*Prerequisite: EDLE 670; course restricted to cohort members*  
Staff selection and development will be studied in the context of the personnel function of public schools as well as techniques of clinical supervision. In addition, strategies such as peer coaching and microteaching, designed to enable the practitioner to promote effective teaching, will be examined. Students will assess the effectiveness of personnel and staff development program approaches as integral to long-range organizational development.

EDLE 665  Fiscal Aspects of School Administration (3 credits)  
*Prerequisite: EDLE 670; course restricted to cohort members*  
This course deals with all aspects of the financing of public schools in Massachusetts and the implementation of Proposition 2 1/2 and the Educational Reform Act of 1993. Major topics include fiscal planning for technology, capital improvements and programs and services. Plant management, accounting, purchasing, transportation, food service and revolving accounts are covered in detail.

EDLE 667  Communication Between and Among School Stakeholders (3 credits)  
*Prerequisite: EDLE 670; course restricted to cohort members*  
Written and oral communication and interpersonal skills are studied and practiced in detail. Topics include sensitivity to all aspects of the audience, targeting the message, identifying power structures and opinion leaders and dealing with conflict and stress. The course addresses the articulation of the vision and mission of schools through the development of a communications plan. A range of community-relations issues including working with the media, business partnerships, school councils and parental interactions are covered.

EDLE 669  Concepts and Cases in School Law (3 credits)  
*Prerequisite: EDLE 670; course restricted to cohort members*  
Constitutional, statutory, regulatory and contractual aspects of public schools are studied. The procedures and strategies for their development and the political implications of their implementation are discussed and analyzed through case studies. Massachusetts Reform Law and the development and implementation, monitoring and revision of school committee policies and procedures are main focus of this course.

EDLE 670  Certificate of Advanced Graduate Study (CAGS) Seminar (3 credits)  
*Prerequisite: Course restricted to cohort members*  
This course is the first course of the program. A major objective of this course is to challenge each student to examine his/her core values and to articulate a vision of public education for the future. The introduction of major concepts of leadership theory is a second major objective. Students study the changing nature of modern organizations and critical leadership skills, including decision-making, team building and the fostering of collaboration in schools. In addition, each student will identify an area of “concern” in his/her district that can become the topic for the required leadership project.

EDLE 672  Technology for Administrators (3 credits)  
*Prerequisite: EDLE 670; course restricted to cohort members*  
This course will examine the many uses of technology in a school administrative setting. Attention will be given to using several computer software management programs, examining state and federal initiatives and guidelines concerning technology in K-12 education, creating administrative multimedia presentations and assessing personal strengths and weaknesses in the use of technology in school administrative roles. Discussions concerning the ethical use of technology in an educational setting will help clarify the role of school administrators as leaders in promoting student and faculty awareness of the proper use of information mediums.

EDLE 675  Research Issues in School Administration (3 credits)  
*Prerequisite: EDLE 670; course restricted to cohort members*  
School leaders have a responsibility to be reflective practitioners and to develop and instill in others the habits of mind that foster inquiry and the active pursuit of school improvement. This course has three primary purposes: 1) to foster skillful and discriminating consumers of educational research; 2) to help participants understand the implications of research for school leaders; and 3) to enable each participant to complete first drafts of the background and significance and literature review of his/her leadership project. In the process, research methodologies and their applications in the school setting will be reviewed.
EDLE 677  Systems Planning for Educational Leaders (3 credits)
Prerequisite: EDLE 670; course restricted to cohort members
Successful educational planning and managerial strategies to assess and define needs, establish priorities, set goals, allocate resources, implement plans and facilitate the instructional process in response to the needs of learners, teachers and the community are explored. Major topics include systems thinking and planning and the principles of total quality management applied to the educational setting. Additionally, this course examines recent research on planning and organizational development in education.

EDLE 678  Curriculum Development and Program Management (3 credits)
Prerequisite: EDLE 670; course restricted to cohort members
This course focuses on the analysis of factors influencing curriculum design, research and reform, including the frameworks in Massachusetts, assessment and evaluation. Trends in curriculum theory and leadership role of administrators in curriculum alignment, instrumental planning, and program assessment are major topics.

EDLE 679  Practicum in School Business (3 or 6 credits)
Prerequisite: EDLE 670
Students enrolled in a practicum for three credits must complete 200 hours of fieldwork. Those students enrolled in six credits of practicum must complete 400 hours of fieldwork. Students will be required to meet national competencies. Information outlining these competencies will be distributed at an orientation meeting. The practicum is jointly supervised by a university supervisor and a cooperating practitioner. This course may be repeated once for a maximum of six credit hours.

EDLE 680  Practicum in Administration of Special Education (3 or 6 credits)
Prerequisite: EDLE 670
Students enrolled in a practicum for three credits must complete 200 hours of fieldwork. Those students enrolled in six credits of practicum must complete 400 hours of fieldwork. Students will be required to meet national competencies. Information outlining these competencies will be distributed at an orientation meeting. The practicum is jointly supervised by a university supervisor and a cooperating practitioner. This course may be repeated once for a maximum of six credit hours.

EDLE 681  CAGS Extern (3 credits)
Prerequisite: EDLE 670; course restricted to cohort members
All CAGS students must complete a leadership project that combines theory and practice and contributes to the knowledge base of educational practitioners. This course focuses on the implementation, documentation and reporting of the student leadership project. Participants, working under the guidance of the instructor, complete their projects and defend them in oral comprehensive examinations. Graded on a (P) Pass/(N) No Pass basis.

EDLE 682  CAGS Extern II (1 credit)
Prerequisite: EDLE 670 and EDLE 681; course restricted to cohort members
A continuation of EDLE 681. Students who do not complete their leadership project in EDLE 681 in an academic year will be required to register for EDLE 682 each semester thereafter (fall and spring) until the project is completed. Graded on a (P) Pass/(N) No Pass basis.

EDLE 683  Practicum in Supervisorship/Directorship (3 or 6 credits)
Prerequisite: EDLE 670
Students enrolled in a practicum for three credits must complete 200 hours of fieldwork. Those students enrolled in six credits of practicum must complete 400 hours of fieldwork. Students will be required to meet national competencies. Information outlining these competencies will be distributed at an orientation meeting. The practicum is jointly supervised by a university supervisor and a cooperating practitioner. This course may be repeated once for a maximum of six credit hours.

EDLE 684  Practicum in Elementary School Principalship (3 or 6 credits)
Prerequisite: EDLE 670
Students enrolled in a practicum for three credits must complete 200 hours of fieldwork. Those students enrolled in six credits of practicum must complete 400 hours of fieldwork. Students will be required to meet national competencies. Information outlining these competencies will be distributed at an orientation meeting. The practicum is jointly supervised by a university supervisor and a cooperating practitioner. This course may be repeated once for a maximum of six credit hours.

EDLE 685  Practicum in Middle School Principalship (3 or 6 credits)
Prerequisite: EDLE 670
Students enrolled in a practicum for three credits must complete 200 hours of fieldwork. Those students enrolled in six credits of practicum must complete 400 hours of fieldwork. Students will be required to meet national competencies. Information outlining these competencies will be distributed at an orientation meeting. The practicum is jointly supervised by a university supervisor and a cooperating practitioner. This course may be repeated once for a maximum of six credit hours.
EDLE 686   Practicum in High School Principalship (3 or 6 credits)
Prerequisite: EDLE 670
Students enrolled in a practicum for three credits must complete 200 hours of fieldwork. Those students enrolled in six credits of practicum must complete 400 hours of fieldwork. Students will be required to meet national competencies. Information outlining these competencies will be distributed at an orientation meeting. The practicum is jointly supervised by a university supervisor and a cooperating practitioner. This course may be repeated once for a maximum of six credit hours.

EDLE 687   Practicum in Superintendency/Assistant Superintendency (3 or 6 credits)
Prerequisite: EDLE 670
Students enrolled in a practicum for three credits must complete 200 hours of fieldwork. Those students enrolled in six credits of practicum must complete 400 hours of fieldwork. Students will be required to meet national competencies. Information outlining these competencies will be distributed at an orientation meeting. The practicum is jointly supervised by a university supervisor and a cooperating practitioner. This course may be repeated once for a maximum of six credit hours.

EDLE 688   Practicum in Directorship of Guidance (3 or 6 credits)
Prerequisite: EDLE 670
Students enrolled in a practicum for three credits must complete 200 hours of fieldwork. Those students enrolled in six credits of practicum must complete 400 hours of fieldwork. Students will be required to meet national competencies. Information outlining these competencies will be distributed at an orientation meeting. The practicum is jointly supervised by a university supervisor and a cooperating practitioner. This course may be repeated once for a maximum of six credit hours.

EDLE 689   Practicum in Directorship of Pupil Personnel Services (3 or 6 credits)
Prerequisite: EDLE 670
Students enrolled in a practicum for three credits must complete 200 hours of fieldwork. Those students enrolled in six credits of practicum must complete 400 hours of fieldwork. Students will be required to meet national competencies. Information outlining these competencies will be distributed at an orientation meeting. The practicum is jointly supervised by a university supervisor and a cooperating practitioner. This course may be repeated once for a maximum of six credit hours.

EDLE 691   The School Superintendency (3 credits)
Prerequisite: EDLE 670
This course explores topics related to the school superintendency, including the nature of the role itself, the skills and competencies needed to prosper in it, critical issues facing superintendents and schools and the dynamics of organizations and perspectives for understanding them.

Educational Leadership: Other Approved Courses
EDLE 559   Administration of Community Education Program
EDLE 566   School Plant Planning and Administration
EDLE 576   Issues for Women Administrators

ELEMENTARY EDUCATION

ELED 120   Child Study in the Early Childhood and Elementary Education Classroom (3 credits)
This course is designed for anyone interested in pursuing an elementary or early childhood teaching license. The goal of this course is to offer integrated knowledge of child educational development, classroom behaviors of children, teaching and the professional roles of school-based faculty and staff. Students will study the physical, social, emotional, cognitive and linguistic development and learning characteristics of children up to grade six. Content to be covered includes diversity in the classroom, English language learners, child educational development theories and research, and the roles and responsibilities of school faculty and staff in meeting children's developmental needs. This course requires 20 hours of observation in an elementary classroom, and the school may request a Criminal Offenders Record Information.

ELED 135 Freshman Honors Colloquium (1 credit)
Prerequisite: Open to Commonwealth Honors students and to others by consent of instructor
Freshman Honors Colloquia allow honors students to explore challenging topics in discussion-based small classes. Specific topics vary by semester and instructor. This course may be repeated for a maximum of three credits. Offered fall semester.

ELED 136 Freshman Honors Colloquium (1 credit)
**ELED 199 First Year Seminar (3 credits)**

Prerequisite: Open to all freshmen with a writing placement score of 3 or above or a SAT score of 500 or above or who have completed ENGL 101. Students with 24 or more transfer credits will have this requirement waived.

First Year Seminars (FYS) are writing-intensive, topic courses that introduce students to academic thought, discourse and practices. FYS courses prepare and orient students toward productive and fulfilling college careers by actively engaging them in a specific academic area of interest. Students will improve their writing, reading, research and basic information and technology skills while learning to work both collaboratively and independently. These courses will fulfill the First Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one FYS course may be taken for credit. (CFYS)

**ELED 200 Introduction to Computers for the Elementary School Classroom (3 credits)**

Designed as a computer literacy course for K-6 pre-service teachers, in-service teachers and supervisory personnel. The course covers the history, capabilities, role and literacy in computer education. Early childhood and elementary school applications are to be explored in a computer laboratory setting. No prior knowledge or experience with computers is assumed. Either semester.

**ELED 220 Introduction to Elementary Education (3 credits)**

This foundations course examines elementary education (grade 1 through grade 6) from a variety of perspectives including historical, sociocultural, and developmental. A 40-hour, field-based experience is attached to this course. This field-based experience is used to contextualize topics and issues including typical and atypical child development, learning theories, diversity, developmentally-appropriate practices, teaching models and approaches, professional teaching standards and critical issues related to teaching and child growth and development. This course prepares students to apply for admission into Bridgewater’s teaching licensure program.

**ELED 250 Foundations of Reading (3 credits)**

This course will explore topics identified by the Foundations of Reading MTEL® (Massachusetts Test for Educator Licensure) and other tests that measure knowledge related to reading and language development. MTEL® objectives will be emphasized, supported by content from the five areas of the Put Reading First Initiative: Phonemic Awareness, Phonics, Vocabulary, Fluency, and Comprehension. Teacher candidates may enroll in this course prior to being admitted to the Professional Education courses and professional courses. (Formerly ELED 320)

**ELED 260 Classroom Experience in Elementary or Early Childhood Education (3 credits)**

Prerequisite: ELED 220 or ECED 230

The main focus of this course is to offer service learning in the classroom. This course mandates 60 hours in an early childhood or elementary classroom and six three-hour seminars as scheduled. Participants will be given performance-based assignments to be completed in the classroom. Seminars will be held on classroom organization and management, developmental appropriate practices, small group instruction and effective practices.

**ELED 286 Sophomore Honors Colloquium (1 credit)**

Prerequisite: Open to Commonwealth Honors students and to others by consent of instructor

Sophomore Honors Colloquia allow honors students to explore challenging topics in discussion-based small classes. Specific topics vary by semester and instructor. This course may be repeated for a maximum of three credits. Offered fall semester.

**ELED 287 Sophomore Honors Colloquium (1 credit)**

Prerequisite: Open to Commonwealth Honors students and to others by consent of instructor

Sophomore Honors Colloquia allow honors students to explore challenging topics in discussion-based small classes. Specific topics vary by semester and instructor. This course may be repeated for a maximum of three credits. Offered spring semester.

**ELED 298 Second Year Seminar (Speaking Intensive) (3 credits)**

Prerequisite: _ _ _ _ 199; Open to all sophomores and juniors who have completed ENGL 101, and the speaking skills requirement. Students with 54 or more transfer credits will have this requirement waived. Cannot be taken if _ _ _ _ 299 is taken for credit.

Second Year Seminars (SYS) are speaking-intensive, topic courses that build on the academic skills and habits introduced in the First Year Seminar. SYS courses engage students in a specific academic area of interest and provide them with the opportunity to reinforce, share and interpret knowledge. Students will improve their speaking, reading, research and basic information and technology skills while building the connections between scholarship and action that are required for lifelong learning. These courses will fulfill the Second Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one SYS course may be taken for credit. (CSYS)
ELED 299  Second Year Seminar (Writing Intensive) (3 credits)
Prerequisite: _ _ _ _ 199: Open to all sophomores and juniors who have completed ENGL 101 and ENGL 102. Students with 54 or more transfer credits will have this requirement waived. Cannot be taken if _ _ _ _ 298 is taken for credit.
Second Year Seminars (SYS) are writing-intensive topic courses that build on the academic skills and habits introduced in the First Year Seminar. SYS courses engage students in a specific academic area of interest and provide them with the opportunity to reinforce, share, and interpret knowledge. Students will improve their writing, reading, research, and basic information and technology skills while building the connections between scholarship and action that are required for lifelong learning. These courses will fulfill the Second Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one SYS course may be taken for credit. (CSYS)

ELED 300  Elementary Art Methods (.5 credit)
Prerequisite: Admission to the Professional Education Program and passing scores on all appropriate MTEL®: Communication and Literacy, Foundations of Reading and General Curriculum
An introduction to methods and materials in art for the elementary teacher. Art projects typical of those done by children in grades K-6 are produced. Classroom management, bulletin board design and lesson introduction techniques are explored. Graded on a (P) Pass/(N) No Pass basis. Either semester.

ELED 310  Teaching Science and Social Studies in the Elementary School (3 credits)
Prerequisite: Admission to the Professional Education Program and passing scores on all appropriate MTEL®: Communication and Literacy, Foundations of Reading and General Curriculum
This course will examine the development of current curriculum that will influence the teaching of science and social studies. Emphasis will be placed on the methodologies of these disciplines with a strong focus on cooperative learning, assessment and hands-on science.

ELED 313  Teaching Science in the Elementary School (3 credits)
Prerequisite: Admission to the Professional Education Program and passing scores on all appropriate MTEL®: Communication and Literacy, Foundations of Reading and General Curriculum, including Mathematics subtest
This course will examine the development of lessons and curriculum for the teaching of science in elementary school. Emphasis will be placed on the methodologies of constructivist science teaching, scientific inquiry, cooperative learning and assessment. Students will plan and implement units of science study that are based on the methodologies learned and on state and national standards. This course will also help students understand engineering and technology principles and their relation to science.

ELED 330  Teaching Reading in the Elementary School (3 credits)
Prerequisite: Admission to the Professional Education Program and passing scores on all appropriate MTEL®: Communication and Literacy, Foundations of Reading and General Curriculum
A consideration of the teaching/learning processes involved in the acquisition of literacy: modeling teacher-child interactions and independent exploration. Careful monitoring of pupil progress and appropriate interventions are emphasized. Either semester.

ELED 340  Teaching Language Arts in the Elementary School (3 credits)
Prerequisite: Admission to the Professional Education Program and passing scores on all appropriate MTEL®: Communication and Literacy, Foundations of Reading and General Curriculum
Strategies in the elementary school to enhance the communication skills of reading, writing, listening and speaking through pupil involvement in purposeful communication will be stressed. Special emphasis will be given to the teaching of writing and to the development of thinking skills through questioning. Either semester. (CWRM)

ELED 344  Teaching Language Arts and Social Studies in the Elementary Classroom (3 credits)
Prerequisite: Admission to the Professional Education Program and passing scores on all appropriate MTEL®: Communication and Literacy, Foundations of Reading and General Curriculum, including Mathematics subtest
This course will consider and practice classroom strategies for use in the elementary school to enhance the underlying and interdependent competencies of Language Arts (reading, writing, listening, speaking, viewing and visually representing), as well as the several delineated conceptual, skill and knowledge areas of social studies (history, geography, civics, government and economics) through pupil involvement in purposeful and critical communication activities. Special emphasis will be given to the teaching of writing within the environment of a writer’s workshop and will also be given to the development of critical thinking skills needed to become a lifelong learner as a teacher of writing and social studies. The major practice point of the course will involve a writing pre-practicum project that will provide teacher candidates with an emerging experience in the teaching of writing in both tutorial and small group settings in a nearby elementary school.

ELED 350  Teaching Mathematics in the Elementary School (3 credits)
Prerequisite: Admission to the Professional Education Program and passing scores on all appropriate MTEL®: Communication and Literacy, Foundations of Reading and General Curriculum
Examining the purpose and content of the contemporary elementary school mathematics curriculum, this course emphasizes how children learn mathematics, a wide variety of teaching procedures and instructional materials, evaluation techniques for use in the classroom and
pedagogical methodology for individualization. Designed also to create awareness of affective experiences in the teaching/learning process of elementary school mathematics. Either semester.

**ELED 355  International Study Tour in Elementary Education (3 credits)**
*Prerequisite: Acceptance through the International Programs Office*
This course will offer students a chance to examine educational structures, policies and institutions of diverse societies and the influence of education on the different aspects of those societies. The travel study tour will begin with pre-travel planning at Bridgewater State University where students have the opportunity to study the destination's educational system and related issues. Course contact will vary depending on faculty and topic selected, as will the specific content requirements and instructional strategies. Either semester.

**ELED 360  Teaching in a Standards-Based, Inclusive Elementary Classroom (3 credits)**
*Prerequisite: Admission to the Professional Education Program and passing scores on all appropriate MTEL®: Communication and Literacy, Foundations of Reading and General Curriculum*
This course explores ways to plan, teach and assess in a standards-based, inclusive classroom. Topics include standards-based curriculum development, constructivism, education evaluation, and assessment (including the design of a professional teaching portfolio). Classroom-based “inclusive” models and teaching strategies and professional teaching standards will be examined. Either semester.

**ELED 362  Methods and Materials in Elementary Art (3 credits)**
*Prerequisite: Admission to the Professional Education Program*
The objective of art education, role of the classroom teacher, developmental stages in the creative growth of children; materials, processes, tools and teaching procedures which will foster this growth at the various grade levels; correlation of art with other subject fields and evaluation of student progress. Offered evenings and summers only.

**ELED 457  Strategies for Managing Classroom Behavior (3 credits)**
This course will assist education students in developing their skills in classroom management. Consideration will be given to successful management models and teaching strategies as they apply to the developmental levels of children. Offered evenings and summers only. May be taken for graduate-level credit.

**ELED 485  Honors Thesis (3 credits)**
*Prerequisite: Open to Commonwealth Honors and Departmental Honors students and to others by consent of instructor*
The Honors Thesis is the culmination of a student’s work in the Honor’s Program, and may consist of either one or two semesters’ pursuit of an advanced student-generated project. Students meet regularly with their thesis adviser. The thesis is read for approval by the department honors committee or its designees. This course may be repeated for a maximum of six credits.

**ELED 490  Supervised Teaching in the Elementary Schools: Art (6 or 12 credits)**
*Prerequisite: Acceptance into student teaching*
Supervised experiences in classroom art activities. Experiences gained in teaching techniques, materials, individual differences, and classroom management. Supervision by the cooperating teacher and college supervisor. Full time for either one quarter or a full semester. Either semester. May be taken for graduate-level credit.

**ELED 491  Internship in Elementary Education (6 or 12 credits)**
*Prerequisite: Employment in a host school system; completion of all College of Education and Allied Studies and Departmental requirements; approval by the department (including site and mentor)*
An internship is a supervised experience for one semester (at least 400 clock hours). To be eligible for an internship a candidate must be employed by the school system and be in the role of an elementary classroom teacher. During this internship a candidate will gain experience and refine his/her skills as a classroom teacher. Interns will have a qualified, on-site mentor and will be supervised by the university. A candidate must demonstrate his/her competencies for initial teaching licensure and complete documentation requirements. May be taken for graduate-level credit.

**ELED 492  Supervised Teaching in Public Schools: Elementary (6 or 12 credits)**
*Prerequisite: Acceptance into student teaching*
This student-teaching practicum is a supervised experience for one semester. Candidates are assigned by the College of Education and Allied Studies to an appropriate elementary-school classroom (grades 1-6) where they will work to develop and refine their teaching skills. Candidates will have the opportunities to observe students and classrooms, design curriculum, practice effective classroom-management techniques, utilize contemporary teaching strategies and differentiate instruction to meet the needs of all learners. Candidates will be coached and supervised by a qualified, on-site cooperating practitioner and a faculty member of the elementary and early childhood department. Candidates are required to attend periodic seminars on educational topics relevant to the student teaching experience. A candidate must demonstrate his/her competencies for initial teaching licensure and complete all departmental requirements. May be taken for six or 12 credits. Dual licensure majors take ELED 492 for six credits. Either semester. May be taken for graduate-level credit.
ELED 498  Internship in Elementary Education (3-15 credits)
Prerequisite: Consent of the department; formal application required
Off-campus experience in an area related to the major. In-depth exposure to educational programs, centers and institutions. This internship does not lead to teacher licensure. This course may be repeated for a maximum of 15 credits.

ELED 499  Directed Study in Elementary Education (1-3 credits)
Prerequisite: Consent of the department; formal application required
Directed study is open to juniors and seniors who have demonstrated critical and analytical abilities in their studies and who wish to pursue a project independently. This course may be taken twice for a maximum of six credits. Offered either semester.

ELED 502  Research (3 or 6 credits)
Prerequisite: Consent of the department; formal application required
Original research undertaken by the graduate student in their field. For details, consult the paragraph titled “Directed or Independent Study” in the “College of Graduate Studies” section of this catalog. This course may be repeated for a maximum of six credits.

ELED 503  Directed Study (1-3 credits)
Prerequisite: Consent of the department; formal application required
Directed study is designed for the graduate student who desires to study selected topics in a specific field. For details, consult the paragraph titled “Directed or Independent Study” in the “School of Graduate Studies” section of this catalog. This course may be repeated for a maximum of six credits.

ELED 510  Fundamentals of Elementary Education (3 credits)
This course is intended to be an introductory course at the graduate level for candidates seeking initial licensure as an elementary teacher (grades 1-6). The course is designed to offer students an understanding of numerous relevant topics in education, for example, the foundations of education as it relates to student learning, effective instructional practices and appropriate accommodations for diverse learners, classroom management models, lesson plan models, diversity and exceptionalities, technological applications for the elementary classroom and resources for practicing teachers. The course is also designed to help students make an informed decision as to their choice of becoming an elementary teacher. During a 40-hour pre-practica experience, aspiring teachers grow as professional educators as they interact with teachers and children, confirming their choice as an elementary educator. Fall and spring semester and summer session.

ELED 511  Theory and Practice in Teaching Reading (3 credits)
Prerequisite: Admission to the MEd in Elementary Education (Initial Licensure) program and completion of ELED 510
A thorough explanation is given of the social-psycho linguistic view of reading and its practical application in the elementary classroom. The acquisition of literacy will be explored through alphabetic principle, guided reading techniques, self-monitoring, teacher-child interactions and a variety of assessments. Students will design, implement and reflect on research-based elementary level reading lessons. The English/Language Arts Curriculum Framework will serve as a guide for classroom instruction.

ELED 512  Theory and Practice in Teaching Language Arts (3 credits)
Prerequisite: ELED 510 and admission to the Professional Education Program
Explorations of language development and acquisition, writing processes and strategies, a variety of genres, motivational techniques and assessment tools will focus around integral components of the Language Arts Program. Effective literacy teaching techniques and strategies will be modeled and explained. Students will design, implement and reflect on research-based elementary language arts lessons. The Massachusetts English/Language Arts Framework will be used as a guide to instruction within the elementary classroom.

ELED 513  Mathematical Applications for the Classroom (3 credits)
Prerequisite: Admission to the MEd in Elementary Education (Initial Licensure) program and completion of ELED 510
Teaching in the context of current research about how children learn mathematics, this course helps participants develop an understanding of what it means to do mathematics. Participants will explore and experience ways math can be taught through problem solving that develops both concepts and procedures. The Massachusetts English/Language Arts Framework will be used as a guide to instruction within the elementary classroom.

ELED 514  Exemplary Practice in Science and Social Studies Classrooms (3 credits)
Prerequisite: ELED 510 or ECED 510; admission to the Professional Education Program
Students in this class will examine the science content and process, which lead to inquiry teaching and learning in the global society. Emphasis will be placed on the acquisition of scientific literacy and global understanding for all students. The Massachusetts State Frameworks and National Standards will be considered.
ELED 515  Differentiating Instruction: Creating Inclusive Classrooms (3 credits)
Prerequisite: Admission to the MEd in Elementary Education (Initial Licensure) program and completion of ELED 510
By participating in in-class and out-of-class experiences and by reviewing the literature related to child development, researched-based instructional and assessment practices and other related topics relevant to differentiating instruction, including child-study procedures and current laws, teacher candidates will be able to use assessment to guide classroom practices and instructional supports to differentiate instruction for all learners.

ELED 517  Exemplary Practice in Science Classrooms (3 credits)
Prerequisite: Admission to the MEd in Elementary Education (Initial Licensure) program and completion of ELED 510
This course will enable students to critique and develop science lessons and curriculum used in elementary schools. Emphasis will be placed on the nature of science and methodologies of constructivist science teaching, scientific inquiry, cooperative learning, and assessment. Students will plan and implement units of science study that are based on the methodologies learned and on state and national standards. This course will also help students understand engineering and technology principles and their relation to science.

ELED 519  Theory and Practice in Teaching Language Arts and Social Studies (3 credits)
Prerequisite: Admission to the MEd in Elementary Education (Initial Licensure) program and completion of ELED 510
This course will consider and practice classroom strategies for use in the elementary school to enhance the underlying and interdependent competencies of language arts (reading, writing, listening, speaking, viewing and visually representing), as well as the several delineated conceptual, skill and knowledge areas of social studies (history/geography, civics/government, economics) through candidate involvement in purposeful and critical communication activities. Special emphasis will be given to the teaching of writing within the framework of a writer’s workshop and to the development of critical thinking skills needed to become a life-long learner as a teacher of writing and social studies. The seamless integration of the language arts into the content areas will be considered throughout the course with a global perspective being the overall organizing principle of this integration.

ELED 535  Mentoring Beginning Teachers (3 credits)
Prerequisite: Consent of department chairperson
This course provides preparation and support for cooperating teachers, who are faculty members of local school districts. Each person who is enrolled in the course has a Bridgewater State University student teacher. Cooperating teachers will learn various tools to observe their student teachers in the classroom. Course participants will learn how to plan and conduct pre-observation and post-observation conferences. In addition, cooperating teachers will study the problems and issues facing beginning teachers in culturally diverse classrooms.

ELED 560  Special Topics in Elementary Education (variable credit)
Prerequisite: Course prerequisite may be specified depending upon the nature of the topic
Special topics of current relevance in elementary education will be offered from time to time. The topic to be addressed will be announced prior to registration. May be taken more than once with the consent of the adviser.

ELED 567  Contemporary Teaching Techniques for Mathematics (3 credits)
Prerequisite: ELED 350
Along with creating a comfortable mathematics environment, this course considers how to assist the student in problem-solving processes, appraisal of current mathematical programs, diagnosing computational error patterns, integrating the computer into the mathematics curriculum. Other selected topics are explored in light of current mathematical standards and trends.

ELED 571  International Study Program in Elementary Education (3 credits)
Prerequisite: Consent of the International Programs Office
This course will offer Bridgewater State University students a chance to examine educational structures, policies and institutions of diverse societies and the influence of education on different aspects of those societies. The travel study abroad program will begin with pre-travel planning at Bridgewater State where students have the opportunity to study the destination’s system and related issues. Course content will vary depending on faculty and topic selected, as will the specific content requirements as long as Bridgewater State requisites are followed. Each course will use a variety of instructional strategies, once again depending on their professor’s intentions, goals for the students and resources available in-country. This course is repeatable for credit.

ELED 591  Employment-Based Practicum: Elementary Education (12 credits)
Prerequisite: Matriculation into the MEd Elementary Education program (Initial License); a passing score in all state licensure exams required for elementary teachers prior to enrolling in this course; employment in a host elementary school as the classroom teacher of record; completion of all College of Education and Allied Studies and departmental requirements; application to the department; approval by the Department of Elementary and Early Childhood Education as well as the site of employment and the on-site mentor.
This is an employment-based practicum where the candidate is employed as the official teacher of record for the elementary classroom and will be in the role of the elementary classroom teacher. During this practicum, the candidate will gain experience and refine his/her skills in the context of classroom management, instruction, and collaboration with other professionals.
skills as an elementary classroom teacher. Candidates will have a qualified, on-site mentor and will be supervised by the university. The candidate must demonstrate his/her competencies for initial teaching licensure and complete documentation requirements.

**ELED 592 Practicum: Elementary Education (6 or 12 credits)**  
*Prerequisite: Acceptance and good standing in teacher preparation program*  
This graduate-level practicum involves supervised experiences in classroom activities and experiences gained in teaching techniques, individual differences and classroom management. Opportunities are available in a variety of instructional environments. Supervision by the cooperating teacher and university supervisor. Full-time for either one quarter or a full semester. *Either semester.*

**Elementary Education: Other Approved Courses**

- **ELED 390** Field-Based Practicum  
- **ELED 441** Methods and Materials in Outdoor Education for the Elementary Teacher  
- **ELED 450** Elementary School Curriculum  
- **ELED 452** Methods and Materials in Elementary Education  
- **ELED 454** Seminar in Elementary Education  
- **ELED 456** Current Issues in Elementary Education  
- **ELED 494** Supervised Teaching in the Elementary School—Music  
- **ELED 520** The Changing Context of Teaching: Mentoring, Clinical Supervision and Peer Coaching  
- **ELED 530** Enhancing Language Skills in the Classroom  
- **ELED 551** Discovering Science: Current Elementary School Science Programs  
- **ELED 552** Advanced Methods for Teaching Science and Social Studies: Theory into Practice  
- **ELED 554** Graduate Seminar in Elementary Education  
- **ELED 556** Curriculum for the Gifted Child in Elementary Schools  
- **ELED 566** Technological Applications for Education  
- **ELED 573** Developing Elementary School Curriculum  
- **ELED 590** Advanced Research Topics in Computer Education for the Elementary School

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**ENGLISH**

Successful completion of ENGL 101 and ENGL 102 (or their equivalent) is a prerequisite to all other English (ENGL) courses with the exception of ENGL 199, ENGL 300 and ENGL 324.

**ENGL 101 Writing Rhetorically (3 credits)**  
*Prerequisite: Placement test*  
By intensive practice in composing persuasive texts, writers explore various techniques for discovering, developing and organizing ideas in relation to rhetorical context. Special attention is given to developing an effective writing process and an awareness of the relationships among text, audience and purpose. (CWR1)

**ENGL 102 Writing Rhetorically with Sources (3 credits)**  
*Prerequisite: ENGL 101 or placement test*  
Continuing to develop knowledge of persuasive writing and rhetoric, the writer learns and practices various approaches to conducting research and to integrating the ideas of others into one’s own text. Emphasis is on writing longer and more substantive texts that incorporate a variety of sources. (CWR2)

**ENGL 135 Freshman Honors Colloquium (1 credit)**  
*Prerequisite: Open to Commonwealth Honors students and to others at the discretion of the instructor and ENGL 102*  
Freshman Honors Colloquia in English allow exceptionally able students to explore a challenging topic in small classes under close faculty supervision. Colloquia meet once a week for 50 minutes and culminate in a paper or scientific project, which provides the major part of the grade. The minimum enrollment is two and the maximum is 12. Topics vary from semester to semester. *Fall semester.*

**ENGL 136 Freshman Honors Colloquium (1 credit)**  
*Prerequisite: Open to Commonwealth Honors students and to others at the discretion of the instructor and ENGL 102*  
Freshman Honors Colloquia in English allow exceptionally able students to explore a challenging topic in small classes under close faculty supervision. Colloquia meet once a week for 50 minutes and culminate in a paper or scientific project, which provides the major part of the grade. The minimum enrollment is two and the maximum is 12. Topics vary from semester to semester. *Spring semester.*

**ENGL 144 Academic Strategies Colloquium (1 credit)
Prerequisite: Consent of Academic Achievement Center
This course is a required co-requisite for targeted sections of ENGL 101. Under faculty supervision, students acquire strategies such as developing thesis into argument and integrating opinion into argument, which will enhance their success in the co-requisite course.

ENGL 145 Academic Strategies Colloquium (1 credit)
Prerequisite: ENGL 101 and consent of the Academic Achievement Center
This course is a co-requisite for targeted sections of ENGL 102 Writing II. Under faculty supervision, students develop the strategies necessary to develop a sustained research paper following academic norms, which will enhance their success in the co-requisite course. Based on each student's needs, students will participate in a book club or be given a conversation partner.

ENGL 199 First Year Seminar (3 credits)
Prerequisite: Open to all freshmen with a writing placement score of 3 or above or a SAT score of 500 or above or who have completed ENGL 101. Students with 24 or more transfer credits will have this requirement waived.
First Year Seminars (FYS) are writing-intensive, topic courses that introduce students to academic thought, discourse and practices. FYS courses prepare and orient students toward productive and fulfilling college careers by actively engaging them in a specific academic area of interest. Students will improve their writing, reading, research and basic information and technology skills while learning to work both collaboratively and independently. These courses will fulfill the First Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one FYS course may be taken for credit. (CFYS)

ENGL 200 Personal and Public Writing (3 credits)
Prerequisite: ENGL 102
This course will explore ways writers move from personal, private writing into a more public sphere. Narrative, ethnographic writing, representation, case studies and genre are concepts which help students consider how writers situate themselves in their research in order to enter and intervene in ongoing public conversation. Students will bring rhetorical awareness to our writing projects as they consider various strategies and audiences.

ENGL 201 Technical Writing I (3 credits)
Prerequisite: ENGL 102
Emphasis on writing with practical applications such as summaries, abstracts, outlines, proposals, interviews, progress reports and a guided research paper. Subject matter is often drawn from the students' own disciplines.

ENGL 202 Business Communication (3 credits)
Prerequisite: ENGL 102
This course develops competence in production of business summaries and abstracts, memoranda and letters and reports. Concerns of style, tone, arrangement, format and information levels are treated in the context of various explicit and implicit management structures.

ENGL 203 Writing About Literature (3 credits)
Prerequisite: ENGL 102; open to English majors and minors only
This course will help students develop the skills needed for writing papers in upper-level literature courses. By reading, discussing and writing about works in various genres, students will learn what sorts of questions are likely to generate insight into a work of literature, how to develop and support such insights in a paper, how to distinguish a valid from an invalid interpretation and how to use the specialized terminology associated with each of the major genres.

ENGL 204 Responding to Writing (1 credit)
Prerequisite: ENGL 102 and consent of the Director of the Writing Studio
This course teaches students to negotiate the demands of responding to writers and their work face-to-face and one-on-one, with an emphasis on collaborative learning techniques, writing processes, interpersonal dynamics and rhetorical analysis. This course is repeatable for up to three credits.

ENGL 205 Supporting Second Language Learners (1 credit)
Prerequisite: ENGL 102 and consent of the director of Second Language Services
This one-credit course teaches students how to effectively support second language learners in one-on-one sessions and in small groups, with the emphasis on collaborative learning techniques, language learning as a process and contrastive rhetoric. Students will explore major theoretical approaches to second language acquisition, discuss the role of cross-cultural differences in second language discourse, and develop effective language support strategies to use in one-on-one and/or small group setting. The course may be repeated for a maximum of three credits.

ENGL 211 Literary Classics of Western Civilization to 1600 (3 credits)
Prerequisite: ENGL 102
Major works of Western literature from ancient times through the Renaissance are studied. The course encompasses diverse literary forms and themes through such works as the Bible, Homeric epic, Greek drama, and The Divine Comedy. (CHUM; CGCL; CWRT)

ENGL 214 The Classical Tradition (3 credits)
Prerequisite: ENGL 102
Major Greek and Roman writers in Modern English translation are studied. Included will be such figures as Homer, Sophocles, Plato and Euripides. (CHUM; CGCL; CWRT)

ENGL 221 Major British Writers to 1800 (3 credits)
Prerequisite: ENGL 102
Representative works by major British writers from the Anglo-Saxon period through the 18th century are studied, including such figures as Chaucer, Shakespeare, Milton, Donne, Pope and Swift. (Satisfies English Literature before 1800 area requirement. Credits only applied once.) (CHUM; CWRT)

ENGL 222 Major British Writers since 1800 (3 credits)
Prerequisite: ENGL 102
Representative works by major British writers of the 19th and 20th centuries are studied, including such figures as Wordsworth, Keats, Tennyson, Dickens, Shaw, Yeats, Eliot, Woolf and Joyce. (CHUM; CWRT)

ENGL 223 Survey of British Literature to 1800 (3 credits)
Prerequisite: ENGL 102; open to English majors and minors only
This survey course will acquaint English majors and minors with key literary texts from the Anglo-Saxon, medieval, Renaissance and 18th century periods. Students will study literary historical periods, the development of literary forms and genres, and the historical and cultural contexts informing these writers’ world views. This course will investigate the self-image of the island nation that established one of the world’s greatest empires. Writers may include Bede, the Beowulf Poet, the Gawain Poet, Julian of Norwood, Chaucer, Marlowe, Shakespeare, Donne, Marvell, Milton, Haywood, Pope and Swift.

ENGL 227 Creative Nonfiction Writing Workshop (3 credits)
Prerequisite: ENGL 102 or consent of instructor
Class members will study the art and craft of creative nonfiction writing through the reading and discussion of published creative nonfiction and creative nonfiction written by students. The goal of this course is to improve writing through careful reading and reflection, thoughtful discussion of and written response to student produced creative nonfiction. May be repeated once for credit.

ENGL 228 Fiction Writing Workshop (3 credits)
Prerequisite: ENGL 102
Class members will study the art and craft of fiction writing through the reading and discussion of published stories and stories written by students. The goal of this course is to improve writing through careful reading and reflection, thoughtful discussion of and written responses to student produced fiction. This course may be repeated once for credit.

ENGL 229 Poetry Writing Workshop (3 credits)
Prerequisite: ENGL 102
Class members will study the art and craft of poetry writing through the reading and discussion of published poems and poems written by students. The goal of this course is to improve writing through careful reading and reflection, thoughtful discussion of and written responses to student produced poetry. This course may be repeated once for credit.

ENGL 230 Creative Writing (3 credits)
Prerequisite: ENGL 102
In this course, students experiment in multiple genres in a workshop setting addressing issues of craft, form and style. Students will practice critical response to student and external models.

ENGL 231 Major American Writers to 1865 (3 credits)
Prerequisite: ENGL 102
Representative works by major American writers from the 17th century through the Civil War are studied. Included are such figures as Franklin, Wheatley, Poe, Emerson, Douglass, Hawthorne, Melville and Whitman. (CHUM; CWRT)

ENGL 232 Major American Writers since 1865 (3 credits)
Prerequisite: ENGL 102
Major American writers from the Civil War to the present are studied including such figures as Twain, Dickinson, James, Frost, Hemingway and Faulkner. (CHUM; CWRT)
ENGL 233  Introduction to the African-American Novel (3 credits)
Prerequisite: ENGL 102
African-Americans have distinguished themselves artistically in many modes of expression, but perhaps none as profoundly as the novel. Tracing the development of this tradition that began before slavery's end, students will read the works of writers such as Hannah Crafts, Zora Neale Hurston, Richard Wright, Ralph Ellison, Alice Walker and Toni Morrison. The course will present these novels not only in their historical and cultural contexts but also in the evolving narrative tradition of African-American writers. Students will understand better how the human questions posed by familiar American authors are also explored by African-American novelists. (CHUM; CMCL; CWRT)

ENGL 234  Survey of American Literature (3 credits)
Prerequisite: ENGL 102; open to English majors and minors only
This survey course will acquaint English majors with key American literary texts and literary-historical periods (colonial, early republican, romantic, realist, naturalist, modernist and postmodernist). Examining literature in the context of 400 years of cultural and historical change, the course will investigate constructions of U.S. national identity as well as changes in literary conventions. Writers may include Bradstreet, Rowlandson, Franklin, Poe, Emerson, Douglass, Melville, Whitman, Dickinson, Twain, James, Hughes, Stein, Hemingway, Faulkner, Morrison, Pynchon and Alexie.

ENGL 241  Shakespeare (3 credits)
Prerequisite: ENGL 102
This general introduction to Shakespeare's plays is set against the background of his time and includes a detailed study of representative tragedies, comedies and histories. (CHUM; CWRT)

ENGL 251  Literary Themes (3 credits)
Prerequisite: ENGL 102
Major literary texts are examined from the perspective of a common theme. In a given semester the course might concern itself with love, the family, madness, law, nature (as examples of particular themes) to illustrate how writers from diverse cultures and/or historical periods working with different genres shape imaginative responses to enduring themes. This course may be repeated for different topics. (CHUM; CWRT)

ENGL 252  Literary Types (3 credits)
Prerequisite: ENGL 102
Major literary texts are examined from the perspective of one genre or type and focus in a given semester on the novel, drama, poetry, short story and biography. Works from diverse cultures and/or historical periods will be used to illustrate how conventions of type or genre shape a writer's discourse. This course may be repeated for different topics. (CHUM; CWRT)

ENGL 253  Non-Western Literature (3 credits)
Prerequisite: ENGL 102
This course introduces the student to the fiction, poetry and drama of the non-Western world. The works to be studied are chosen both for their literary qualities and for insight into different social contexts and cultural conditions. (CHUM; CGCL; CWRT)

ENGL 254  Literature for Elementary Education Majors (3 credits)
Prerequisite: ENGL 102
Literary texts from diverse cultures and historical periods will be examined in the context of either a common theme or a single literary genre. Representative works for British, American and world literature in translation will be used to practice techniques of close reading and to develop an understanding both of literary form and technique. Special attention will be given to the manner in which literature reflects the beliefs and values of its historical context. The student will learn various ways of talking and writing about literature. (Designed for non-English major elementary education students.) (CHUM; CWRT)

ENGL 255  East Asian Literature in Translation (3 credits)
Prerequisite: ENGL 102
The course is a writing-intensive seminar designed to introduce students to a variety of texts by East Asian authors. Students will gain insight into other cultures through the examination and analysis of literary works from China, Taiwan, Korea, Japan, Vietnam, Cambodia, and the Philippines. (CGCL, CHUM, CMCL, CWRT)

ENGL 261  Film Study: Introduction to the Art (3 credits)
Prerequisite: ENGL 102
Major American and foreign films and directors from the silent era to the present are evaluated to develop critical awareness and aesthetic appreciation of film as an art form. In addition, film viewing, readings in film theory, interpretation and criticism are required. (CHUM; CWRT)

ENGL 262  Film Study: Literature and Film (3 credits)
Prerequisite: ENGL 102
A cross-disciplinary study of film and literature, this course will develop an understanding of the various aesthetic and narrative demands of both forms of representation. Potential topics may include cinematic techniques adopted by writers, literary devices in film narrative, point of view and perspective, singular versus collaborative authorship and adaptations of literature into film. Viewing and reading works in both media will be required. (CHUM; CWRT)

ENGL 280  The Journalistic Essay (3 credits)
Prerequisite: ENGL 102
Students will write nonfiction prose with an emphasis on developing characters, settings, scenes and point of view. Projects may include travel essays, reviews, biography and other human interest pieces. The course also introduces students to the foundations of the writer's workshop.

ENGL 286  Sophomore Honors Colloquium
Prerequisite: ENGL 102 and consent of instructor
Sophomore Honors Colloquia in English allow exceptionally able students to explore a challenging topic in small classes under close faculty supervision. Colloquia meet once a week for 50 minutes and culminate in a paper or scientific project, which provides the major part of the grade. Open to Commonwealth Honors students and to others at the discretion of the instructor. The minimum enrollment is two and the maximum is 12. Topics vary from semester to semester. Fall semester.

ENGL 287  Sophomore Honors Colloquium (1 credit)
Prerequisite: ENGL 102 and consent of instructor
Sophomore Honors Colloquia in English allow exceptionally able students to explore a challenging topic in small classes under close faculty supervision. Colloquia meet once a week for 50 minutes and culminate in a paper or scientific project, which provides the major part of the grade. Open to Commonwealth Honors students and to others at the discretion of the instructor. The minimum enrollment is two and the maximum is 12. Topics vary from semester to semester. Spring semester.

ENGL 298  Second Year Seminar (Speaking Intensive) (3 credits)
Prerequisite: _ _ _ _ 199; Open to all sophomores and juniors who have completed ENGL 101, and the speaking skills requirement. Students with 54 or more transfer credits will have this requirement waived. Cannot be taken if _ _ _ _ 299 is taken for credit.
Second Year Seminars (SYS) are speaking-intensive, topic courses that build on the academic skills and habits introduced in the First Year Seminar. SYS courses engage students in a specific academic area of interest and provide them with the opportunity to reinforce, share and interpret knowledge. Students will improve their speaking, reading, research and basic information and technology skills while building the connections between scholarship and action that are required for lifelong learning. These courses will fulfill the Second Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one SYS course may be taken for credit. (CSYS)

ENGL 299  Second Year Seminar (Writing Intensive) (3 credits)
Prerequisite: _ _ _ _ 199; Open to all sophomores and juniors who have completed ENGL 101 and ENGL 102. Students with 54 or more transfer credits will have this requirement waived. Cannot be taken if _ _ _ _ 298 is taken for credit.
Second Year Seminars (SYS) are writing-intensive, topic courses that build on the academic skills and habits introduced in the First Year Seminar. SYS courses engage students in a specific academic area of interest and provide them with the opportunity to reinforce, share and interpret knowledge. Students will improve their writing, reading, research and basic information and technology skills while building the connections between scholarship and action that are required for lifelong learning. These courses will fulfill the Second Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one SYS course may be taken for credit. (CSYS)

ENGL 300  Teaching English to Speakers of Other Languages (3 credits)
Designed for prospective teachers and students interested in international careers, this course introduces the field of Teaching English to Speakers of Other Languages (TESOL). The course explores current research in second language acquisition and connects it to different teaching contexts, including teaching English as a second language at the secondary level, inclusive ESL methodologies in the mainstream classes, workplace ESL and teaching English abroad. Special attention is paid to the issues of identity construction, language ownership and creative expression in a second language. Offered every other year. (Formerly LANG 330)

ENGL 301  Writing and the Teaching of Writing (3 credits)
Prerequisite: ENGL 102
Designed for prospective teachers, the course undertakes an investigation of current research in the writing process and in writing pedagogy with application made to the student's own writing, school curriculum and effective teaching practice.

ENGL 303  Writing Our Heritages (3 credits)
In this course students investigate their family stories, migrations and heritages using field, archival, genealogical and library research, as well as oral histories, family photos and artifacts, and draw from these materials as well as their own life experiences to compose a variety of writing projects. Students also read essays and memoirs that explore the connections among identity, family history, landscape and heritage. Offered every other year.

ENGL 305 History of the English Language (3 credits)
Prerequisite: ENGL 102
This course considers the development of English from its Indo-European origins to its present status as a de facto international language. It traces the historical, literary and philological features of English in the Anglo-Saxon, Anglo-Norman, Early Modern and Modern periods; special attention is also paid to the developments of American English as well as to the different varieties of English spoken around the globe.

ENGL 306 Sagas of the Icelanders (3 credits)
Prerequisite: ENGL 102
This is a course of study incorporating the literature and cultural history of medieval Iceland. The course addresses several important authors and texts (including Snorri Sturluson, the Eddas, Heimskringla, Njals saga, Hrafnkels saga and others) from an interdisciplinary perspective that includes elements of history, cultural anthropology and literary study.

ENGL 309 Early American Literature, Beginnings to 1820 (3 credits)
Prerequisite: ENGL 102
This course begins with the first colonization of the Americas and stretches beyond the Revolution to the early national period and the beginnings of Romanticism. The full range of early American writing is covered, including poetry, drama, fiction and autobiography, as well as English-language texts of Native Americans. Authors such as Anne Bradstreet, Olaudah Equiano, Benjamin Franklin and Washington Irving will be explored.

ENGL 312 Modern British Fiction (3 credits)
Prerequisite: ENGL 102
This course focuses on earlier 20th-century British fiction writers such as Conrad, Forster, Lawrence, Joyce and Woolf.

ENGL 314 Medieval English Literature (3 credits)
Prerequisite: ENGL 211 or ENGL 221 or consent of instructor
Selected readings in non-Chaucerian writing: Langland, Gower, romance, lyrics, drama.

ENGL 315 Ethnic American Literature (3 credits)
Prerequisite: ENGL 102
This course will focus on American writers representing a diverse range of racial, ethnic, economic, cultural, political and historical perspectives. In addition to identifying and discussing literary terms and techniques, we will examine a number of literary genres. We will explore concepts and themes such as immigration and assimilation, family dynamics, the intersections of race, gender, class and sexuality and the relationship between personal and political realms. The reading list may include writers such as Sherman Alexie, Julia Alvarez, David Henry Hwang, and Jamaica Kincaid.

ENGL 317 African-American Literature I (3 credits)
Prerequisite: ENGL 102
Students will survey writings in African-American literature from its inception through 1954, the year of the landmark Brown v. Board of Education ruling that outlawed segregation. Studying distinguished writers of poetry, drama, essays, narratives and prose fiction, students will attend to the historical, cultural and political contexts in which the works were produced.

ENGL 318 African-American Literature II (3 credits)
Prerequisite: ENGL 102
Many of the freedoms and rights that African-Americans enjoy today began with the historic 1954 Brown vs Board of Education ruling that outlawed segregation. Starting with this pivotal time in American history and continuing to the present, students will survey African-American poetry, drama, essays, narratives and prose fiction with close attention paid to their historical, political and cultural contexts.

ENGL 320 Chaucer (3 credits)
Prerequisite: ENGL 102
This course provides an introduction to Chaucer's poetry and Middle English through readings in The Canterbury Tales.

ENGL 321 The Age of Pope: 1660-1740 (3 credits)
Prerequisite: ENGL 102
The course surveys the literature of the early 18\textsuperscript{th} century with emphasis on the works of Pope, Swift, Gay, Addison and Steele.

ENGL 322  The Age of Johnson: 1740-1800 (3 credits)
Prerequisite: ENGL 102
The course examines the writings of several major 18th-century figures, such as Johnson, Boswell, Fielding, Richardson, Goldsmith and Burney.

ENGL 323  Introduction to Linguistics (3 credits)
Prerequisite: ENGL 102
The course introduces phonology, phonetics, syntax, semantics, and linguistic variation and change as applied to the English language.

ENGL 324  Language and Society (3 credits)
The course explores topics in sociolinguistics, including regional and social dialects; gender-specific difference in language use; language change; cross-linguistic borrowing; language birth, death and revival; bilingualism and multilingualism in societies and on the individual level. Special attention is paid to language policies and planning. The course draws examples from English and a variety of other languages. Travel may be required as part of this course. Offered every other year. (Formerly LANG 324) (CHUM; CMCL)

ENGL 325  Cultural Rhetorics (3 credits)
Prerequisite: ENGL 102
In this course, the particular focus will be on cultural rhetorics: the intersections of rhetorics, cultures and power. Rhetoric has often been defined in terms of persuasion, and this course will utilize and challenge that definition. Students will begin by analyzing the space from which they operate and make meaning, and how that space has the power to shape perceptions. Students will read and write about rhetorical constructions such as race, ethnicity, culture, sexuality, ability, gender and class. They will investigate a variety of texts including digital, material, visual, performance and popular culture. Offered annually.

ENGL 326  Native American Writing and Rhetoric (3 credits)
Prerequisite: ENGL 102
This course will examine a variety of writings by Native Americans from different periods and regions. Drawing on the vast range of native cultures and their many rhetorical forms, from traditional oral literatures to political documents to novels, films and poems, the course will explore how native writers have contributed to the ongoing effort to preserve cultural, political and rhetorical sovereignty in the face of colonial ideologies. Writers may include Samson Occom, William Apess, Zitkala-Sa, Louise Erdrich, Leslie Marmon Silko, Sherman Alexie, Scott Richard Lyons, Vine Deloria, Jr, Linda Tuhawai Smith, Joy Harjo and Robert Warrior. Offered annually.

ENGL 327  Women Writers: The Female Tradition to 1900 (3 credits)
Prerequisite: ENGL 102
This course traces the history and development of a female literary tradition among English-speaking women writers. The dominant stages, images and themes and genres within this tradition will be explored through the work of writers such as Bradstreet, Killigrew, Wheatley, Wollstonecraft, Dickinson, Eliot, Browning, Rossetti, Gilman and Chopin.

ENGL 328  Women Writers: The Female Tradition since 1900 (3 credits)
Prerequisite: ENGL 102
English-speaking women writers in the female literary tradition developed a number of dominant themes in a range of literary genres. The accomplishment of 20\textsuperscript{th}-century women authors will be shown through such writers as Lowell, Woolf, Wharton, Porter, Hellman, Brooks, Lessing, Plath, Oates, Atwood and Morrison.

ENGL 329  Modern American Fiction (3 credits)
Prerequisite: ENGL 102
This course examines American fiction from 1900 to 1945, an era in which writers moved from the tradition of realistic fiction to the radical reinvention of literature in an effort to grapple with technological change, transformations in gender and racial norms and the traumas of World War I and the Great Depression. Authors studied might include Kate Chopin, Jack London, Henry James, Gertrude Stein, Ernest Hemingway, F. Scott Fitzgerald, Zora Neale Hurston, William Faulkner and John Steinbeck.

ENGL 330  Recent American Fiction (3 credits)
Prerequisite: ENGL 102
Fiction from 1945 to the present addresses the key themes of recent American culture: the psychological toll of modern global warfare, America as a multi-ethnic nation, assimilation and disillusionment with the American dream, shifting gender roles, the effects of the Civil Rights movement, postmodern dislocation and meaninglessness, suburban malaise, the spread of consumer capitalism and a relaxation of the boundaries between high and low culture. Authors studied might include Flannery O'Connor, Saul Bellow, James Baldwin, Thomas Pynchon, Toni Morrison, Don DeLillo and Sherman Alexie.
ENGL 331  U.S. Literature in the 19th Century I (3 credits)
Prerequisite: ENGL 102
The era from 1800-1865 was filled with calls for distinctly American literature, and the responses were as varied and ambitious as the new nation itself. Writers celebrated the frontier and developed transcendentalism; wrote sentimental best sellers, twisted gothic tales and fiery abolitionist tracts; brought the novel to unparalleled philosophical depth and invented modern poetry. Authors studied might include James Fenimore Cooper, Edgar Allan Poe, Ralph Waldo Emerson, Henry David Thoreau, Nathaniel Hawthorne, Frederick Douglass, Harriet Beecher Stowe, Walt Whitman, Herman Melville and Emily Dickinson.

ENGL 332  U.S. Literature in the 19th Century II (3 credits)
Prerequisite: ENGL 102
The later part of the nineteenth century saw a nation shattered by civil war become one of the great powers in the world. American literature of this era is shaped by – and helped shape – this process. Short stories, novels, poetry and, eventually, film provided a crucial forum for Americans to forge a new national consensus after the Civil War, to negotiate the role race, class, ethnicity and gender would play in their culture, and to define their identity as an industrial power with a worldwide empire. Authors studied might include Walt Whitman, Emily Dickinson, Mark Twain, Paul Laurence Dunbar, Charles Chesnutt, Sarah Orne Jewett, Edith Wharton, Stephen Crane and Henry James.

ENGL 333  Realism and Naturalism (3 credits)
Prerequisite: ENGL 102
At the turn of the century, American literature reflects the decline of rural life and the rise of the city. The growth of industry and mechanization led to questions about human nature and democratic values. The consequent human experiences of displacement, alienation and injustice can be seen in the literature from Howells to Wright.

ENGL 335  Elizabethan and Jacobean Drama (3 credits)
Prerequisite: ENGL 102
This course involves reading and discussion of a number of plays by contemporaries of Shakespeare such as Johnson, Marlowe and Webster with attention to contemporary social developments as well as to the historical development of the English play.

ENGL 336  American Modernism (3 credits)
Prerequisite: ENGL 102
Focusing on literature and culture produced in the United States between 1890 and 1945, this course explores the cultural sensibility of “modernism”. This course will examine the shared aesthetic and thematic concerns of producers of fiction, poetry, drama, non-fiction manifestos, art and film in this period, as they presented their work as a break from 19th century values and artistic modes. The course will pay particular attention to the historical contexts that catalyzed the modernist movement and key recurring themes in modernist culture. Figures studied may include Hemingway, Gilman, Eliot, Larsen, O’Neill, Anderson, Faulkner, Williams, Stevens, Cather, Hopper and Stein.

ENGL 338  Honors Tutorial (3 credits)
Prerequisite: ENGL 102 and consent of the department
This tutorial involves special topics in English. It is open to Commonwealth and Departmental Honors students. Three hourly meetings weekly.

ENGL 340  Literature of the English Renaissance (3 credits)
Prerequisite: ENGL 102
This course examines the non-dramatic literature of the Age of Shakespeare including the works of Sidney, Spenser, Nashe, Marlowe and Drayton. Textual analysis is emphasized, but the historical, social and cultural background of this period is also considered.

ENGL 341  Literature of the Continental Renaissance (3 credits)
Prerequisite: ENGL 102
This course surveys representative works of Petrarch, Boccaccio, Machiavelli, Erasmus, Castiglione, Rabelais, Cellini, Montaigne, Cervantes and Ronsard representing prevailing literary themes and techniques.

ENGL 342  Shakespeare: Histories and Comedies (3 credits)
Prerequisite: ENGL 102
This course provides examples of Shakespeare’s art in dominant Renaissance dramatic forms and with some of his recurring thematic concerns. In addition, study of the histories and comedies demonstrates Shakespeare’s growth in the dramatic use of language. Plays for study will include The Comedy of Errors, Two Gentlemen of Verona, Much Ado About Nothing, As You Like It, Twelfth Night, Richard III, Richard II, Henry IV, Parts I and II and Henry V.
ENGL 343   Shakespeare: Tragedies and Late Plays (3 credits)
Prerequisite: ENGL 102
Study of the late plays provides the student with examples of dramatic works that proceed beyond the tragic dimension. Selected plays will include Hamlet, King Lear, Othello, Macbeth, Antony and Cleopatra, Measure for Measure, The Winter's Tale and The Tempest.

ENGL 346   Southern Literature
(3 credits)
Prerequisite: ENGL 102
This course focuses on the personal, cultural, and social dimensions of southern literature in works by William Faulkner, Tennessee Williams, Zora Neale Hurston, Flannery O'Connor, Eudora Welty, Alice Walker and William Styron.

ENGL 350   Recent British Fiction (3 credits)
Prerequisite: ENGL 102
This course focuses on British fiction since 1945. Writers to be studied may include Golding, Graves, Lessing, Murdoch, Greene, Ballard and Powell.

ENGL 353   Modern European Drama (3 credits)
Prerequisite: ENGL 102
Students will study the main forces in Modern European drama starting with Ibsen.

ENGL 354   20th-Century British Drama (3 credits)
Prerequisite: ENGL 102
The course surveys British drama from Oscar Wilde to the present. Attention may be given to the crucial role that continental dramatists such as Ibsen, Chekhov and Brecht played in re-energizing the British Theater. There will be emphasis on plays from the modern period as well as contemporary works. Playwrights studied may include Oscar Wilde, George Bernard Shaw, John Osborne, Samuel Beckett, Harold Pinter, Tom Stoppard and Caryl Churchill.

ENGL 356   Modern American Drama (3 credits)
Prerequisite: ENGL 102
From social dramas and morality plays to the theater of the absurd, modern drama develops a range of themes and techniques reflective of the age. Focus will be on such playwrights as Odets, Wilder, Saroyan, O'Neill, Hellman, Williams, Hansberry, Miller, Baldwin and Albee.

ENGL 357   Recent American Drama (3 credits)
Prerequisite: ENGL 102
The experimentation in contemporary American plays will be explored in such writers as Mamet, Howe, Rabe, Wasserstein, Norman, Shepard, Guare, Henley, Wilson, Hwang and McNally.

ENGL 360   The English Novel I (3 credits)
Prerequisite: ENGL 102
The course traces the development of the English novel from Defoe to Austin and includes writers such as Richardson, Fielding, Smollett, Sterne and Scot.

ENGL 361   The English Novel II (3 credits)
Prerequisite: ENGL 102
The course traces the development of the English novel from Austen to Hardy and includes such writers as Dickens, the Brontës, Thackeray, Eliot, Trollope and Conrad.

ENGL 365   Victorian Prose and Poetry (3 credits)
Prerequisite: ENGL 102
The major emphasis is placed on the poetry of Tennyson, Browning and Arnold, but the works of other 19th-century poets such as Hopkins and Hardy will also be read and discussed. The essays of Carlyle, Ruskin, Arnold, Newman, Huxley and others are studied in conjunction with the poetry.

ENGL 367   English Literature of the Late Victorian and Edwardian Periods (3 credits)
Prerequisite: ENGL 102
The major writers of the late 19th and early 20th centuries are examined from aesthetic, social and intellectual vantage points, with readings in such prose writers as Gissing, James, Wilde, Beerbohm, Carroll, Wells, Hardy, Corvo, Forster and Conrad and such poets as Rossetti, Swinburne, Morris, Hopkins and Yeats.

ENGL 370   17th-Century Literature (3 credits)
Prerequisite: ENGL 102
The course is an introduction to the prose and poetry of the 17th century in England, exclusive of Milton. Such writers as Donne, Jonson, Bacon, Burton, Browne and Dryden will be examined, and various persistent elements, such as the classical influence, will be explored.

ENGL 371 Advanced Creative Nonfiction Writing Workshop (3 credits)
Prerequisite: ENGL 227 or consent of instructor
This course will provide students with the opportunity for the intense study of the art and craft of creative nonfiction writing. Students will submit creative nonfiction for peer critique in addition to reading and discussing published works.

ENGL 372 Advanced Fiction Writing Workshop (3 credits)
Prerequisite: ENGL 228 or consent of instructor
This course offers an intense study of the art and craft of fiction writing. Students will submit fiction for peer critique and develop a body of revised work that Writing Concentration students may include in their portfolios. This course may be repeated once for credit.

ENGL 380 Milton (3 credits)
Prerequisite: ENGL 102
The course includes the main works of Milton: Paradise Lost, Paradise Regained and Samson Agonistes, the minor poetic works, and selected prose.

ENGL 381 Irish Literature I (3 credits)
Prerequisite: ENGL 102
The course is a survey of earlier Irish literature in translation from the Gaelic and in English. It includes selections from the epic poem, Tain Bo Cualnge; Gaelic lyric poetry (600-1800 A.D.); the pioneering fiction of Maria Edgeworth and William Carleton; and the poetry of the 19th-century balladeers, Thomas Moore, Thomas Davis, James Clarence Manahan and Sir Samuel Ferguson; the accomplishments of the Irish literary revival of 1890-1920: fiction by Daniel Corkery, George Moore, Seamus O'Kelly and James Joyce; poetry and plays by William Butler Yeats; and plays by John M. Synge.

ENGL 382 Irish Literature II (3 credits)
Prerequisite: ENGL 102
This course is a survey of later modern and contemporary Irish literature including the later fiction of James Joyce and the later poetry of William Butler Yeats; the plays of Sean O'Casey, Brendan Behan, Samuel Beckett and Brian Friel; the poetry of Austin Clarke, Patrick Kavanagh, Thomas Kinsella, John Montague, Richard Murphy and Seamus Heaney; the fiction of Liam O'Flaherty, Sean O'Faolain, Frank O'Connor, Flann O'Brien, Mary Lavin, William Trevor, Edna O'Brien and others.

ENGL 386 English Romantic Poets (3 credits)
Prerequisite: ENGL 102
The course examines selected poetry and prose of writers such as Wordsworth, Coleridge, Shelley and Keats with the principal objective of understanding the character and modes of expression of each poet's imaginative vision. Consideration is given to historical background and to developments in philosophy and aesthetic theory which have a direct bearing on Romantic poetry.

ENGL 388 Topics in Film (3 credits)
Prerequisite: ENGL 102
This course will explore topics in film study, varying from semester to semester. Topics may include film directors or auteurs, genres (e.g. French New Wave), time periods (e.g. early silent pictures), film theory (e.g. psychoanalytic) or socio-historical topics (e.g. race or gender in film; war films and national identity). This course may be repeated for different topics. Offered once per year.

ENGL 389 Topics in Writing (3 credits)
Prerequisite: ENGL 102
The course explores writing on different subjects from semester to semester according to interest and demand. Recent topics include genre theory, writing assessment, memoir and heritage, and indigenous rhetorics. This course may be repeated for different topics.

ENGL 390 Theories of Writing (3 credits)
Prerequisite: ENGL 102
The course introduces students to theories of writing emerging from research in the field of composition and rhetoric. Students will look at a variety of ways in which writing, writing processes and writing pedagogies have been viewed, discussed, contested and taught.

ENGL 391 Modern Literary Criticism (3 credits)
Prerequisite: ENGL 102
This course examines the major critics and critical movements of the 20th century, particularly in the United States and England, but with some attention to continental critical thought. Critics and theorists such as T.S. Eliot, I.A. Richards, John Crowe Ransom, Edmund Wilson,
Lionel Trilling, Northrop Frye, Raymond Williams and Roland Barthes are studied. The principles and methods of several kinds of criticism – formalist, Marxist, psycho-analytical, structuralist and post-structuralist – are examined.

ENGL 392 Advanced Poetry Writing Workshop (3 credits)
Prerequisite: ENGL 229 or consent of instructor
This course offers an intensive workshop approach to poetry writing for students who wish to submit poems for peer review and develop a poetry portfolio. This course may be repeated once for credit.

ENGL 393 Modern British Poetry (3 credits)
Prerequisite: ENGL 102
The major British poets of the 20th century are studied with particular emphasis on the works of Hopkins, Hardy, Yeats, Eliot, Auden and Thomas.

ENGL 394 Modern American Poetry (3 credits)
Prerequisite: ENGL 102
The major American poets of the 20th century are studied with articular emphasis on the works of Robinson, Frost, Crane, Auden, Williams and Stevens.

ENGL 395 Studies in Recent American Poetry (3 credits)
Prerequisite: ENGL 102
American poets practicing from 1945 to the present are surveyed. Among these poets may be Robert Lowell, John Berryman, Theodore Roethke, Richard Wilbur, Adrienne Rich, Anne Sexton, Sylvia Plath, James Wright, Richard Hugo, Randall Jarrell, Gwendolyn Brooks, Robert Hayden and Gary Snyder. Others may be included from time to time.

ENGL 399 Topics in Literature (3 credits)
Prerequisite: ENGL 102
This course explores literature on different topics from semester to semester according to interest and demand. Possible topics may include The Bible as Literature, Irish American Literature, Transcendentalism, or The Literature of Aging. This course is repeatable with different topics.

ENGL 485 Honors Thesis (3 credits)
Prerequisite: Open to Commonwealth and Departmental Honors students and ENGL 102
In this course, one-hour weekly meetings with the thesis director will culminate in an honors thesis. With the consent of the departmental honors committee and the thesis director, this course may be extended into a second semester for three additional credits depending upon the scope of the project.

ENGL 489 Advanced Portfolio Workshop (3 credits)
Prerequisite: ENGL 101 and ENGL 102 and one 300 level writing course
This course serves as the culmination of the writing concentration. Students will demonstrate, through the creation of a portfolio of work, their facility in writing within the genres relevant to their professional goals. Additionally, students will frame their writing practice theoretically as well as investigate the steps related to publication and entrance into writing professions.

ENGL 490 Literary Studies in Oxford (3 credits)
Prerequisite: ENGL 102; students will normally be expected to be in their junior or senior year
Close readings of several major works emphasizing the dynamic relationship between literary texts and the cultural and intellectual environments in which they were created. Authors and periods studied will vary. (This is a special program in England at Oxford University during July. Additional fees are required.) May be taken for graduate-level credit.

ENGL 491 Literary Studies in Sligo, Ireland (3 credits)
Prerequisite: ENGL 102
Students will engage in the intensive study of topics in Irish literature and culture in Sligo, near the home of William Butler Yeats and other key figures in Irish culture. This course will combine lectures, cultural events and field trips. Authors and periods will vary. (This is a special summer program in Sligo at St. Angela’s National University. Additional fees are required.)

ENGL 494 Seminar: Special Topics (3 credits)
Prerequisite: ENGL 102 and ENGL 203 and 12 additional credits in the major
The seminar gives advanced English majors the opportunity for an in-depth study of selected topics in language and literature. Students are expected to demonstrate a proficiency in interpretation and analysis as well as a familiarity with critical theory and major scholarship.
relating to the seminar topic through close reading, class discussion, oral presentations, and at least one carefully documented scholarly paper. May be taken for graduate-level credit. (CWRM)

**ENGL 495 Seminar: British Literature and Culture (3 credits)**

*Prerequisite: ENGL 102 and ENGL 203 and 12 additional credits in the major*

The seminar gives advanced English majors the opportunity for an in-depth study of selected authors and topics in British and Commonwealth literature and culture. Students are expected to demonstrate a proficiency in interpretation and literary analysis as well as a familiarity with critical theory and major scholarship relating to the seminar topic through close reading, class discussion, oral presentations and at least one carefully documented scholarly paper. May be taken for graduate-level credit. (CWRM)

**ENGL 496 Seminar: American Literature and Culture (3 credits)**

*Prerequisite: ENGL 102 and ENGL 203 and 12 additional credits in the major*

The seminar gives advanced English majors the opportunity for an in-depth study of selected authors and topics in American literature and culture. Students are expected to demonstrate a proficiency in interpretation and literary analysis as well as a familiarity with critical theory and major scholarship relating to the seminar topic through close reading, class discussion, oral presentations, and at least one carefully documented scholarly paper. May be taken for graduate-level credit. (CWRM)

**ENGL 497 Seminar: World Literatures and Cultures (3 credits)**

*Prerequisite: ENGL 102 and ENGL 203 and 12 additional credits in the major*

The seminar gives advanced English majors the opportunity for an in-depth study of selected authors and topics in world literatures and cultures. Students are expected to demonstrate a proficiency in interpretation and literary analysis as well as a familiarity with critical theory and major scholarship relating to the seminar topic through close reading, class discussion, oral presentations, and at least one carefully documented scholarly paper. May be taken for graduate-level credit. (CWRM)

**ENGL 498 Internship in English (3-15 credits)**

*Prerequisite: ENGL 102 and consent of the department; formal application required*

This internship provides non-classroom work-study experience in areas related to the expanding discipline of English, such as editing, journalism, media, public relations and technical writing. A maximum of three credits may be included in the 18 elective credits required in the major. This course may be repeated for a maximum of 15 credits.

**ENGL 499 Directed Study in English (1-3 credits)**

*Prerequisite: ENGL 102 and consent of the department; formal application required*

Directed study is open to juniors and seniors who have demonstrated critical and analytical abilities in their studies and who wish to pursue a project independently. This course may be taken twice for a maximum of six credits.

**ENGL 500 Introduction to Graduate Study in English (3 credits)**

This course will examine the backgrounds and techniques of literary scholarship. Some acquaintance with critical approaches to literature, as well as comprehensive experience in the major genres and periods of English and American literature, will be assumed. Required of MA and MAT candidates in English.

**ENGL 502 Research or Creative Writing Project (3 or 6 credits)**

*Prerequisite: Consent of the department; formal application required*

Original research or creative writing project undertaken by the graduate student in a specific field. For details, consult the paragraph titled “Directed or Independent Study” in the “School of Graduate Studies” section of this catalog. This course may be repeated for different topics for a maximum of six credits.

**ENGL 503 Directed Study (1-3 credits)**

*Prerequisite: Consent of the department; formal application required*

Directed study is designed for the graduate student who desires to study selected topics in a specific field. For details consult the paragraph titled “Directed or Independent Study” in the “School of Graduate Studies” section of this catalog. This course may be repeated for a maximum of six credits.

**ENGL 511 Special Topics in Writing (3 credits)**

Addresses special topics of current relevance in research and instruction in writing. This course may be taken more than once, as different topics are offered.

**ENGL 513 Theories of Writing (3 credits)**
This course focuses on current theories of composition from theoretical, historical, and professional perspectives. Students will examine how such theories of writing present a kind of professional history of the field of composition and rhetoric and explore the ways they inform educational policy. Students will read, write, and present on these and various related topics.

**ENGL 514 Linguistics for TESOL (3 credits)**
This course introduces students to the formal study of language as a uniquely human system of communication. Students examine major approaches in such subfields of linguistics as phonetics, phonology, morphology, syntax, semantics, pragmatics and sociolinguistics. The focus of the course is on exploring how the systematic study of language informs best practices for teaching English as a second language.

**ENGL 515 Studies in Medieval Drama (3 credits)**
This course will investigate representative mystery, miracle and morality plays written in England and Europe during the medieval period.

**ENGL 516 Theories of Second Language Acquisition (3 credits)**
This course will introduce students to a variety of theoretical approaches in the field of second language acquisition, including Universal Grammar, Monitor Theory, Sociocultural Theory, Cognitive Theory and Critical Applied Linguistics. Special attention will be paid to the role of individual learner factors, gender, ethnicity, social class and education context in the process of second language acquisition. Students will examine both the processes and the effects of acquiring a second language in childhood and in adulthood in terms of identity construction, social justice, and individual and community linguistics rights.

**ENGL 517 Critical Approaches to TESOL Methods (3 credits)**
This course will introduce students to a variety of methodological approaches in the field of Teaching English to Students of Other Languages (TESOL). Students will explore each method within its historical context and examine it at the level of underlying second language theories, design and procedures. The course is built upon a critical awareness that there is not one best method to discover and apply, but that teachers need to develop their own philosophy and practices of teaching that are specific to their educational contexts and the needs of learners. The course will be useful to students new to the field of TESOL and experienced teachers interested in current postmodern pedagogies.

**ENGL 518 Issues in Second Language Writing (3 credits)**
Drawing from landmark and contemporary research on language writers in high school, college, outside of the curriculum, online and in the workplace, this course focuses on issues related to second language writing, examining such topics as second language writing development; written accent; contrastive rhetoric; biliteracy as a resource for writing; identity in second language writing; and inclusive and equitable writing pedagogy and assessment.

**ENGL 519 Language and Power (3 credits)**
This course will focus on the many sociolinguistic issues which relate to TESOL, such as the politics of bilingual education, world englises, ownership of English, English as a colonizing force and the myth of monolingualism in U.S. classrooms.

**ENGL 520 Studies in Shakespeare and the Renaissance (3 credits)**
Students will analyze selected plays by Shakespeare with special emphasis in each play on the received tradition and on the relationship among the significant aspects of the language, the characters, and the structures. In addition, attention will be given to the use of source material and to the philosophical, social and scientific currents of the age. Finally, students will be examining traditional and contemporary critical views of the plays.

**ENGL 521 Special Topics in TESOL (3 credits)**
Examples of topics include “Introduction to Bilingualism,” “Cross-Cultural Rhetorics,” “Research Methods in Second Language Writing,” “Sociolinguistics in the Second Language Classroom,” “Writing in a Second Language: Contemporary Bilingual Voices” and “Second Language Writers and Speakers in Contemporary Film and Literature.” This course may be repeated for different topics.

**ENGL 531 Studies in 18th-Century British Literature (3 credits)**
This course is an intensive exploration of the poetry, prose fiction, drama and intellectual prose by major and minor authors from Dryden, Pope, Swift, Defoe and Fielding to Johnson, Boswell, Burke, Austen and Blake.

**ENGL 535 Studies in British Romanticism (3 credits)**
This course is an in-depth study of the poetry and prose of the Romantic Period, including writers such as Wordsworth, Coleridge, Byron, Blake, Shelley, Keats, Charlotte Smith, Mary Shelley and Dorothy Wordsworth.

**ENGL 551 American Transcendentalism (3 credits)**
Development and influence of American Transcendentalism in the literature of Emerson, Thoreau and Alcott will be investigated.

**ENGL 552 Contemporary American Fiction (3 credits)**
This course intensively examines two or more major American writers from 1945 to present. This course defines postmodern fiction, while emphasizing innovative narrative structures and textures in the work of Nabokov, Hawkes, Barth, Barthelme, Pynchon, Morrison and others.

**ENGL 565 Modern Critical Theory (3 credits)**
This course will focus on the major American and European schools of criticism that have influenced literary studies in the past forty years. Attention will be given to formalist, structuralist, phenomenological, post-structural, reader-response, Marxist, psycho-analytical, hermeneutic, feminist and new historical schools of criticism.

**ENGL 570 Graduate Seminar in American Literature (3 credits)**
A particular author, group of authors, or theme in American literature will be studied in depth. Topics will change from year to year.

**ENGL 580 Graduate Seminar in English Literature (3 credits)**
A particular author, group of authors, or theme in English literature will be studied in depth. Topics will change from year to year. This course may be repeated for different topics.

**ENGL 590 Graduate Seminar in World Literature (3 credits)**
A particular author, group of authors, or theme in world literature will be studied in depth. Topics will change from year to year. This course may be repeated twice for a maximum of nine credits for different topics.

**ENGL 592 Fiction Writing Workshop (3 credits)**
This course offers graduate students an intense study of the art and craft of creative fiction writing. Students submit fiction for peer critique and read works of published writers. This course may be repeated for credit.

**ENGL 593 Poetry Writing Workshop (3 credits)**
This course offers graduate students an intense study of the art and craft of poetry writing. Students submit creative poetry for peer critique and read works of published writers. This course may be repeated for credit.

**ENGL 595 Creative Nonfiction Writing Workshop (3 credits)**
This course offers graduate students an intense study of the art and craft of creative nonfiction writing. Students submit creative nonfiction for peer critique and read works of published writers. This course may be repeated for credit.

**ENGL 599 Internship (3-6 credits)**
*Prerequisite: Consent of department chairperson*
The internship provides practical professional experience in areas related to the discipline of English, such as editing and journalism. Some internship credit may be applicable to the creative writing concentration requirements and repeatable for credit.

**English: Other Approved Courses**

- **ENGL 302 Technical Writing II**
- **ENGL 339 Honors Tutorial**
- **ENGL 377 Post-Colonial Literature and Theory**
- **ENGL 396 Rhetoric and Style (3 credits)**
  *Prerequisite: ENGL 102*
  In this course, students read critical essays on rhetorical theory as well as a variety of texts, exploring the effectiveness of the writers' stylistic moves in relation to rhetorical issues, such as goals, audience and genre. Students will apply this knowledge of rhetoric and style to their own writings through a series of writing projects.
- **ENGL 527 Studies in Seventeenth-Century English Literature**
- **ENGL 541 Studies in the Novel**
- **ENGL 542 Studies in Victorian Literature**
- **ENGL 562 Studies in Modern Drama**

**ENGLISH AS A SECOND LANGUAGE**

- **ENSL 101 English as a Second Language I (3 credits)**
An introduction to syntactic, semantic, phonetic and paralinguistic structures is offered. Pertinent everyday cultural concepts are discussed. Relevant comparison and contrast with the native language is treated. Functional communication in the second language in a controlled academic environment is the principal objective of the course. (Formerly LAEN 101) Note: See the “Departmental Foreign Language Policy” in the “Foreign Languages” section of this catalog. (CHUM; CGCL)

ENSL 102  English as a Second Language II (3 credits)
Prerequisite: ENSL 101; or see the “Departmental Foreign Language Policy” in the “Foreign Languages” section of this catalog
The further study of syntactic, semantic, phonetic and paralinguistic structures is offered. Pertinent everyday cultural concepts are discussed. Relevant comparison and contrast with the native language is treated. Functional communication in the second language in a controlled academic environment is the principal objective of the course. (Formerly LAEN 102) (CHUM; CGCL)

ENSL 151  Intermediate English as a Second Language (3 credits)
Prerequisite: ENSL 101; and ENSL 102 or ESL IV (high school); or consent of instructor
The course is designed to accommodate the linguistic needs of ESL students who have successfully completed ENSL 102 or ESL IV in high school and would like to continue with their systematic learning of English. The course emphasizes English Language skills necessary for academic reading, writing, listening and speaking. Students are introduced to aspects of American culture, participate in systematic laboratory practice and utilize a variety of media resources. Fall semester. (Formerly LAEN 151) (CHUM; CGCL)

ENSL 199  First Year Seminar (3 credits)
Prerequisite: Open to all freshmen with a writing placement score of 3 or above or a SAT score of 500 or above. Students with 24 or more transfer credits will have this requirement waived.
First Year Seminars (FYS) are writing-intensive, topic courses that introduce students to academic thought, discourse and practices. FYS courses prepare and orient students toward productive and fulfilling college careers by actively engaging them in a specific academic area of interest. Students will improve their writing, reading, research and basic information and technology skills while learning to work both collaboratively and independently. These courses will fulfill the First Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one FYS course may be taken for credit. (CFYS)

ENSL 298  Second Year Seminar (Speaking Intensive) (3 credits)
Prerequisite: _ _ _ _ 199; Open to all sophomores and juniors who have completed ENGL 101, and the speaking skills requirement. Students with 54 or more transfer credits will have this requirement waived. Cannot be taken if _ _ _ _ 299 is taken for credit.
Second Year Seminars (SYS) are speaking-intensive, topic courses that build on the academic skills and habits introduced in the First Year Seminar. SYS courses engage students in a specific academic area of interest and provide them with the opportunity to reinforce, share and interpret knowledge. Students will improve their speaking, reading, research and basic information and technology skills while building the connections between scholarship and action that are required for lifelong learning. These courses will fulfill the Second Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one SYS course may be taken for credit. (CSYS)

ENSL 299  Second Year Seminar (Writing Intensive) (3 credits)
Prerequisite: _ _ _ _ 199; Open to all sophomores and juniors who have completed ENGL 101 and ENGL 102. Students with 54 or more transfer credits will have this requirement waived. Cannot be taken if _ _ _ _ 298 is taken for credit.
Second Year Seminars (SYS) are writing-intensive, topic courses that build on the academic skills and habits introduced in the First Year Seminar. SYS courses engage students in a specific academic area of interest and provide them with the opportunity to reinforce, share and interpret knowledge. Students will improve their writing, reading, research and basic information and technology skills while building the connections between scholarship and action that are required for lifelong learning. These courses will fulfill the Second Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one SYS course may be taken for credit. (CSYS)

- FRENCH

LAFR 101  Elementary French I (3 credits)
An introduction to elementary syntactic, semantic, phonetic and paralinguistic structures is offered. Pertinent everyday cultural concepts are discussed. Relevant comparison and contrast with the native language is treated. Functional communication in the second language in a controlled environment is the principal objective of the course. Note: See the “Departmental Foreign Language Policy” in the “Foreign Languages” section of this catalog. (CGCL; CHUM)

LAFR 102  Elementary French II (3 credits)
Prerequisite: LAFR 101; or see the “Departmental Foreign Language Policy” in the “Foreign Languages” section of this catalog
The further study of elementary syntactic, semantic, phonetic and paralinguistic structures is offered. Pertinent everyday cultural concepts discussed. Relevant comparison and contrast with the native language is treated. Functional communication in the second language in a controlled environment is the principal objective of the course. (CGCL; CHUM)

LAFR 199 First Year Seminar (3 credits)
Prerequisite: Open to all freshmen with a writing placement score of 3 or above or a SAT score of 500 or above. Students with 24 or more transfer credits will have this requirement waived.
First Year Seminars (FYS) are writing-intensive, topic courses that introduce students to academic thought, discourse and practices. FYS courses prepare and orient students toward productive and fulfilling college careers by actively engaging them in a specific academic area of interest. Students will improve their writing, reading, research and basic information and technology skills while learning to work both collaboratively and independently. These courses will fulfill the First Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one FYS course may be taken for credit. (CFYS)

LAFR 251 Intermediate French (3 credits)
Prerequisite: LAFR 102
This course is a review of French grammar with emphasis given to reading, writing, listening and speaking; systematic laboratory practice; and an introduction to aspects of Francophone culture. (CGCL; CHUM)

LAFR 298 Second Year Seminar (Speaking Intensive) (3 credits)
Prerequisite: _ _ _ _199; Open to all sophomores and juniors who have completed ENGL 101, and the speaking skills requirement. Students with 54 or more transfer credits will have this requirement waived. Cannot be taken if _ _ _ _299 is taken for credit.
Second Year Seminars (SYS) are speaking-intensive, topic courses that build on the academic skills and habits introduced in the First Year Seminar. SYS courses engage students in a specific academic area of interest and provide them with the opportunity to reinforce, share and interpret knowledge. Students will improve their speaking, reading, research and basic information and technology skills while building the connections between scholarship and action that are required for lifelong learning. These courses will fulfill the Second Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one SYS course may be taken for credit. (CSYS)

LAFR 299 Second Year Seminar (Writing Intensive) (3 credits)
Prerequisite: _ _ _ _199; Open to all sophomores and juniors who have completed ENGL 101 and ENGL 102. Students with 54 or more transfer credits will have this requirement waived. Cannot be taken if _ _ _ _298 is taken for credit.
Second Year Seminars (SYS) are writing-intensive, topic courses that build on the academic skills and habits introduced in the First Year Seminar. SYS courses engage students in a specific academic area of interest and provide them with the opportunity to reinforce, share and interpret knowledge. Students will improve their writing, reading, research and basic information and technology skills while building the connections between scholarship and action that are required for lifelong learning. These courses will fulfill the Second Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one SYS course may be taken for credit. (CSYS)

French: Other Approved Courses

LAFR 252 Reading in French

- FRESHMAN SKILLS

FRSK 102 Introductory College Skills: Mathematics (3 credits)
This course is individualized, self-paced and competency-based and covers the fundamental principles of arithmetic, algebra, and geometry including signed numbers, whole numbers, fractions, decimals, percents, exponents, equations, inequalities, rational equations, geometry and problem solving. This course does not satisfy any core curriculum requirement, nor may the credits be applied toward the minimum credits required for graduation by any major. Graded on a (P) Pass/(N) No Pass basis. Either semester.

Freshman Skills: Other Approved Courses

FRSK 100 - Introductory College Skills: Intrusive Advising
(1 credit)
A specialized learning/advising program for freshmen offered by the Academic Achievement Center conducted in a small group setting. In
this process, students are encouraged to explore their learning styles, possible career interests and academic goals in terms of the total
college environment in a shared and supportive setting. The credit earned may not be used to satisfy any core curriculum requirement, nor
may it be applied toward the minimum number of credits required for graduation in any major. Graded on a (P) Pass/(N) No Pass basis.
Either semester.

- GEOGRAPHY

GEOG 121  Physical Geography (4 credits)
This course is an introduction to physical geography phenomena (landforms, climate, oceans, soils) in which human-land relationships are
central. The focus is on understanding the processes at work in the environment and on their interrelationships. Three hours of lecture and
one two-hour laboratory period weekly. Either semester. (Formerly GEOG 100) (CNSL)

GEOG 122  The Physical World (3 credits)
This course studies the formation and distribution of landforms, climates, soils and vegetation. Emphasis is placed on the inter-
relationships among these components of the environment and their significance to life on earth. Cannot be taken if GEOG 121 is taken for
credit. Either semester. (Formerly GEOG 120) (CNSN)

GEOG 130  Environmental Geography (3 credits)
The spatial aspects of the interaction between humans and their physical environment are examined through the analysis of selected
problems from resource capacity to pollution. The perceptions of environmental hazards of human settlements are examined to illuminate
environmental decision-making. Either semester. (Formerly GEOG 196) (CNSN)

GEOG 151  Human Geography (3 credits)
An inquiry into the theoretical and empirical approaches to the study of human spatial analysis is presented. The major topics covered
include population, race, language, religion, politics, urbanization and economics. Each semester. (Formerly GEOG 110) (CGCL; CMCL;
CSOC)

GEOG 171  Geography of the Developing World (3 credits)
This course in human geography introduces the geographical study of the current cultural and social systems in the non-Western world (in
Africa, Asia and Latin America). Emphasis is placed on the diversity of cultural frameworks and their strategies for dealing with problems.
Fall semester. (Formerly GEOG 160) (CGCL; CMCL; CSOC)

GEOG 172  Regional Geography of the Global North (3 credits)
The study of regional geography of the developed world (including Anglo-America, Europe and the Soviet Union, Australia and Japan)
investigates how humans have used the resources available to them to obtain a high standard of living in different physical and cultural
milieux. This high standard of living is reflected in land-use patterns that are similar in their broad outlines but different in detail. Spring
semester. (Formerly GEOG 170)

GEOG 199  First Year Seminar (3 credits)
Prerequisite: Open to all freshmen with a writing placement score of 3 or above or a SAT score of 500 or above or who have completed
ENGL 101. Students with 24 or more transfer credits will have this requirement waived.
First Year Seminars (FYS) are writing-intensive, topic courses that introduce students to academic thought, discourse and practices. FYS
courses prepare and orient students toward productive and fulfilling college careers by actively engaging them in a specific academic area
of interest. Students will improve their writing, reading, research and basic information and technology skills while learning to work both
collaboratively and independently. These courses will fulfill the First Year Seminar requirement and may fulfill other requirements for the
core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one FYS course may be taken
for credit. (CFYS)

GEOG 211  Cartography (4 credits)
Maps are valuable tools for displaying, interpreting and analyzing patterns of human-environment interactions. This course introduces the
basic concepts and procedures necessary to design, construct, interpret and update straightforward and effective maps. Students will learn
the process and methods of map design, including: digitizing, creating maps with computer-aided drawing software, manipulating data with
a spreadsheet, and using specialized mapping software to visualize and analyze geographically distributed data. This course provides a
background for applied mapping courses in geographic information systems (GIS). Three hours of lecture and one two-hour laboratory
weekly.
GEOG 213 Geographic Information Systems (GIS) I (3 credits)
Maps are valuable tools for displaying, interpreting and analyzing patterns of human-environment interactions. This course introduces the basic concepts and procedures necessary to design, construct, interpret, update and present straightforward and effective maps using computer techniques. Students will practice skills of georeferencing and digitizing raster-based images at various scales to produce vector-based map layers for integration into geographic information systems (GIS). This course provides the necessary background for more advanced courses in GIS. **Fall semester.**

GEOG 221 Meteorology (4 credits)
*Prerequisite: GEOG 121 or GEOG 122 or EASC 100 or AVSC 105*
This course introduces the basic atmospheric processes and important properties of the Earth's surface that create changeable patterns. Students will use state-of-the-art instrumentation to practice observing weather and learn the essentials of reading and forecasting with weather maps. Lectures and laboratories will focus on energy transfer, clouds, wind patterns, fronts, jet streams, precipitation, and various types of weather with impacts on society ranging from thunderstorms to hurricanes. Three hours of lecture and one two-hour laboratory period weekly. **Offered fall semester.** (CNSL; CQUR)

GEOG 222 Climatology (3 credits)
*Prerequisite: GEOG 121 or GEOG 122 or consent of instructor*
This course introduces students to regional climate classifications and factors controlling past, current and future climate on Earth. How changes in land use and emissions of greenhouse gases affect weather and the consequences for water resources, health, economy and energy consumption are covered. This course will provide an understanding of the connections between air, water, ice, living things and the solid Earth which help determine changes in the climate system. Students will learn how the climate system works through discussions of current issues, observation with weather instruments, data and map interpretation and team-oriented debates. **Offered spring semester.** (Formerly GEOG 204) (CNSN)

GEOG 290 Introduction to Geographic Analysis (3 credits)
*Prerequisite: For majors or minors in geography only; GEOG 121 or GEOG 151*
This course provides a survey of spatial techniques that geographers use to define, research and analyze geographic issues and phenomena. Students will learn to identify real-life geographic problems at a range of spatial scales, from the local to the global. Instructional methods will emphasize hands-on exposure through local field problems and field trips, access to library resources and journals, instrumentation, basic surveying, and professional presentation skills. **Spring semester.**

GEOG 298 Second Year Seminar (Speaking Intensive) (3 credits)
*Prerequisite: GEOG 199; Open to all sophomores and juniors who have completed ENGL 101, and the speaking skills requirement. Students with 54 or more transfer credits will have this requirement waived. Cannot be taken if GEOG 299 is taken for credit. Second Year Seminars (SYS) are speaking-intensive, topic courses that build on the academic skills and habits introduced in the First Year Seminar. SYS courses engage students in a specific academic area of interest and provide them with the opportunity to reinforce, share and interpret knowledge. Students will improve their speaking, reading, research and basic information and technology skills while building the connections between scholarship and action that are required for lifelong learning. These courses will fulfill the Second Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one SYS course may be taken for credit. (CSYS)*

GEOG 299 Second Year Seminar (Writing Intensive) (3 credits)
*Prerequisite: GEOG 199; Open to all sophomores and juniors who have completed ENGL 101 and ENGL 102. Students with 54 or more transfer credits will have this requirement waived. Cannot be taken if GEOG 298 is taken for credit. Second Year Seminars (SYS) are writing-intensive, topic courses that build on the academic skills and habits introduced in the First Year Seminar. SYS courses engage students in a specific academic area of interest and provide them with the opportunity to reinforce, share and interpret knowledge. Students will improve their writing, reading, research and basic information and technology skills while building the connections between scholarship and action that are required for lifelong learning. These courses will fulfill the Second Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one SYS course may be taken for credit. (CSYS)*

GEOG 314 Satellite Image Processing Applications to the Environment (3 credits)
*Prerequisite: Any GEOG course; familiarity with computers recommended*
The acquisition of information for intensive environmental monitoring is increasingly done through remote sensing, which permits a rapid, efficient manner for analysis and decision making by environmental researchers and resource managers. This course will explore techniques to analyze remotely sensed data using a variety of image-analysis systems. Principles of acquisition and interpretation of data collected by imaging sensor such as radar, thermal and multispectral scanners are discussed. Digital-image-processing techniques such as rectification and restoration (processing), image enhancement, image classification and data merging are covered. The course is taught...
as a combination of lectures and computer laboratory time with hands-on use of one of the remote-sensing softwares. Offered alternate years, fall semester.

**GEOG 315  Quantitative Geography (3 credits)**  
*Prerequisite: MATH 110*  
Geographers use statistical techniques to measure, describe, classify, analyze, and display information (data) in search of spatial patterns and trends. Geographers make comparisons and examine relationships to answer questions, solve problems and make wise decisions that support a particular objective. This course introduces and applies statistical techniques and computer and model building methodology to analyze various spatial phenomena. *(Formerly GEOG 474) (CQUR)*

**GEOG 317  Air Photo Interpretation — Remote Sensing (3 credits)**  
*Prerequisite: GEOG 100 or GEOG 122 or EASC 100*  
Theory and practice in extracting information about the earth's physical and cultural features from aerial photographs. Acquaints students with the detection, identification, and analysis of the earth's features through remote sensing. The application of computerized digital-image processing to satellite environmental data. Two hours of lecture and one two-hour laboratory weekly. *Fall semester.*

**GEOG 321  Meteorology II (3 credits)**  
*Prerequisite: GEOG 221 or consent of instructor*  
Students will learn how to use meteorological measurements from local and global networks of weather stations to produce and analyze weather maps/charts using computer software. Laboratory exercises use meteorological software to visualize and interpret atmospheric patterns based on data from advanced computer models, satellite remote sensing, and networks of weather stations. In addition, students will augment computer modeling with laboratory techniques for simplifying, visualizing and analyzing complex atmospheric processes, such as the global circulation, turbulence and icing. The course includes field trips to professional meteorological agencies and observatories. *Alternate spring semesters.*

**GEOG 322  Biogeography (4 credits)**  
*Prerequisite: GEOG 121 or BIOL 121*  
This field- and lab-based course presents the scope of biogeography as currently practiced in North America. In addition to the academic underpinnings of evolution, disturbance, ecology, and conservation, we explore the key topics of biomes, biodiversity, and animal and plant migration. Organisms vary greatly over space and over time, and thus are a prime topic of study for the geographer. *Alternate fall semesters.*

**GEOG 323  Water Resources (3 credits)**  
*Prerequisite: GEOG 290 or consent of instructor*  
This course investigates the complex physical systems involved in the movement of water and how water interfaces with the human landscape. Students will outline and define the economic and legal relationships involved in the supply and demand of this required resource, and analyze problems associated with the management and planning of the distribution of this vital resource. *Alternate spring semesters.*

**GEOG 324  Earth Surface Processes (4 credits)**  
*Prerequisite: GEOG 290*  
Process is the action produced when a force induces a change. The experiences in this course will introduce the student to the physical processes that create landforms on the earth's surface: mountains, river valleys, caves, dunes, coastlines, glaciers. Field work and laboratory techniques used in modern physical geography will help us analyze problems associated with current challenges in the earth's changing surface. *Alternate fall semesters.*

**GEOG 331  Geography of Environmental Problems (3 credits)**  
*Prerequisite: EASC 100 or GEOG 121 or GEOG 122*  
Environmental problems are considered in this course from the geographer's point of view -- problems such as population density and distribution; balanced land use and its philosophic, aesthetic, and scientific basis; the circulation of goods and people; and a comparison of levels of development. *Spring semester.* *(Formerly GEOG 361)*

**GEOG 332  Management and Preservation of the Natural Environment (3 credits)**  
*Prerequisite: Junior standing and consent of the instructor*  
This course is devoted to a detailed examination of the occurrence, exploitation and conservation of natural resources, including minerals, soils, water, forest, grassland, fisheries, wildlife, recreation areas and scenery. Emphasis is placed on conservation in the United States. *Fall semester.* *(Formerly GEOG 307)*

**GEOG 333  Geography of Environmental Justice (3 credits)**
Prerequisite: Any GEOG course or consent of instructor
This course describes problems of environmental justice as they affect disadvantaged populations. The course reviews the history of this social movement in the U.S. It then examines studies that link the environmental and civil rights movements in recent years and that describe the major problems of identifying environmental injustice both in categorical terms and as a spatial issue. Special attention is given to spatial measurement issues. **Alternate years, fall semester.**

GEOG 340  Geography Materials and Methods (3 credits)
Prerequisite: Any GEOG course
This course is focused on the maps, globes, and other geographic learning material that are used in developing and extending geographic knowledge and insight. Current techniques and alternative frameworks in the field of geographic education are emphasized. The course details an examination of the strategies, texts, materials and media that can be used to enhance the teaching and learning of geography within our schools. It closely integrates geographic content and teaching methods so that a truly geographic view of the world can be developed in the classroom. **Offered alternate years, spring semester.** (Formerly GEOG 320)

GEOG 350  Economic Geography (3 credits)
Prerequisite: Any GEOG or ECON course or consent of instructor
The geographical analysis of the distribution of economic activities such as production, exchange and consumption is presented in this course. Here we examine the principles underlying spatial variations in land use and economic development at the local, national and international levels. **Fall semester.** (Formerly GEOG 362)

GEOG 353  Urban Geography (3 credits)
Prerequisite: Any GEOG course or consent of instructor
The geographic aspects of the city including location, function, land-use patterns and interaction. Fieldwork focuses on current problems facing urban life. **Fall semester.**

GEOG 354  Field Methods in Urban Geography (3 credits)
Prerequisite: GEOG 353
A geography analysis of local urban areas and their problems, and the application of concepts learned in GEOG 353. Hours will be arranged.

GEOG 355  Political Geography (3 credits)
Prerequisite: Any GEOG or POLI course
The course examines the variation of politically organized areas and their relationships to each other. The focus is on the interaction of geographical factors (distance, location and distribution) and political process. Emphasis is on both state and non-state agents in the political arrangement of space. **Fall semester.** (Formerly GEOG 473)

GEOG 363  Locational Analysis (3 credits)
Prerequisite: GEOG 290 or consent of instructor
The spatial approach is utilized to analyze retail, industrial, and public utility location. Topics covered include demographic analysis, retail structure, location factors and economic development. **Alternate years, fall semester.**

GEOG 365  Geography of Transportation (3 credits)
Prerequisite: Any GEOG course or consent of instructor
This course will provide a spatial understanding of the role of transportation and interaction. It will provide an analysis of the importance of location relative to economic activities, development of distribution systems, flow analysis, effectiveness of distribution systems and the impact of transport systems on economic development. **(Formerly GEOG 430)**

GEOG 374  Geography of the Middle East (3 credits)
This course provides a survey of the regional geography of the Middle East including the physical setting, environmental issues, economic development and the evolution of the Middle Eastern landscape and cultures. Special emphasis will be placed on current geopolitical issues in the region. **Alternate fall semesters.** (CGCL; CMCL; CSOC)

GEOG 375  Geography of South Asia (3 credits)
This course provides a survey of the physical and human geography of South Asia, particularly India, Pakistan, Bangladesh, Nepal, Bhutan, Maldives, and Sri Lanka. This course emphasizes the region’s major environmental, economic and cultural geography patterns, processes and issues. Problems related to religious, ethnic and linguistic diversity are examined in the context of modernization and economic development. Interrelationships between South Asian nations will also be explored. (CGCL; CMCL; CSOC)

GEOG 376  Geography of East Asia (3 credits)
This course offers a study of the physical and human geography of East Asia, in context of the interrelationships between East Asian countries, their neighbors, and the world. This course will investigate major political, economic, social and environmental geography patterns, processes, and issues of China, Taiwan, Japan, Korea, Vietnam and Malaysia.

GEOG 381 Geography of Latin America (3 credits)
Prerequisite: GEOG 121 or GEOG 122 or GEOG 151
Physical and cultural patterns of selected countries of South America. Emphasis on current economic and political problems. (Formerly GEOG 358) (CGCL; CMCL; CSOC; CWRT)

GEOG 383 Geography of the United States (3 credits)
Prerequisite: GEOG 151
The land and people of the United States intertwine to form a vast, complex, ever-changing fabric. As one of the great economic powers in the world, the U.S. must meet the challenges of governing a huge country of pronounced regionalisms, while living next door to the economic and political questions marks of Mexico and Canada. Students will explore such diverse topics as ancient mountain systems, environmental and resource issues, urban and rural immigrant populations and their historic and current distributions, regional cuisines and America's appeal to the traveler. Alternate spring semesters.

GEOG 386 Geography of Canada (3 credits)
Prerequisite: GEOG 121 or GEOG 122 or consent of instructor
The geography of environment, resources and population is examined in relation to history, economic and regional land patterns of Canada. Offered alternate years, spring semester.

GEOG 388 Geography of Africa (3 credits)
Prerequisite: Any 100 level GEOG course
The physical and cultural features of the African continent with special reference to the emerged political and regional patterns. Spring semester. (CGCL; CSOC)

GEOG 400 Special Topics in Geography (3 credits)
Prerequisite: Junior standing or consent of instructor
This course entails vigorous analysis of various topics of special interest. May be taken for credit more than once with change of topic. The course will be offered on an occasional basis.

GEOG 413 Geographic Information Systems (GIS) II (3 credits)
Prerequisite: GEOG 213 or consent of instructor
This course offers a solid background in the fundamentals of Geographic Information Systems (GIS) to explore the analytical capabilities of GIS and apply them to real-world situations. Application of GIS techniques to problems in a variety of fields, including land-use planning, natural resource management, transportation, and urban and regional planning will be examined. Students develop their own projects and work at a more advanced level solving spatial problems with GIS. Students will have the practical experience of using GIS programming skills to solve real-world problems in a customized fashion. Spring semester.

GEOG 422 Online Weather Studies (3 credits)
In this meteorology course, which is designed and serviced by the American Meteorological Society (AMS), students will access and work with current weather maps delivered via the Internet, and will coordinate these maps with learning activities keyed to the day's weather. This study of the atmosphere includes weather systems from local to global scales, severe weather and current weather applications. The course meets three times per semester for evaluation. All other activities are executed solely on the Internet, with the faculty mentor guiding the student in understanding the basic principles of meteorology and analyzing real-time weather data. Spring semester. (Formerly GEOG 402) May be taken for graduate-level credit.

GEOG 431 Environmental Regulations (3 credits)
Prerequisite: GEOG 130 or GEOG 331 or consent of instructor
This course examines environmental regulation as a significant aspect of environmental geography, which is the study of spatial aspects of the interaction between humans and the natural world. In the United States, much of that interaction is mediated through environmental regulations, which in turn arise from a series of landmark environmental laws, including the Clean Air Act, the Clean Water Act, the Resources Conservation and Recovery Act and Superfund. Students will learn about the origins of these acts, how they give rise to regulations, and how enforcement of regulations is articulated at the federal, state and local levels. Innovations such as toxic reduction will be discussed in a regulatory context, as will the implications of regulatory programs for non-government organizations, consultants and private industry. Alternate spring semesters.

GEOG 441 Geographic Frameworks (3 credits)
Prerequisite: GEOG 290 or consent of instructor
This course enables undergraduate students majoring in primary or secondary education to develop a detailed understanding of the discipline of geography. State, national and international framework documents are examined, with particular attention to current Massachusetts frameworks. The course is organized around such fundamental geographic concepts as place, scale, regions and human-environment interaction. It demonstrates how geographers use these concepts to develop a greater understanding of the world. Alternate fall semesters.

GEOG 462 Principles of Urban Planning (3 credits)
Prerequisite: GEOG 213 and GEOG 290; or consent of instructor
An introduction to the process of planning which deals with the interrelationships of resources, facilities, activities, and people over time and space. Offered alternate years, spring semester. (Formerly GEOG 420) May be taken for graduate-level credit.

GEOG 463 Applications in Urban Planning (3 credits)
Prerequisite: GEOG 462
This course is intended for students with a strong interest in urban and regional planning. The course examines past cases and future proposals for a variety of land use and zoning decisions. The focus is on applying good growth management practices that allow communities to sustain their economic health, foster diversity, and promote sense of place. Students will analyze current trends in population, employment and housing in order to construct an example master plan that relates these factors to land use and development choices that promote smart growth. Alternate years, spring semester.

GEOG 490 Seminar in Geography (3 credits)
Prerequisite: Open to geography majors in their final year
The historical development of methods and techniques used in geographic research. Preparation of a research paper on a problem selected from one of the subdivisions of geography. For senior geography majors. Fall semester. May be taken for graduate-level credit. (CWRM)

GEOG 495 Field Experience in Geography (1-3 credits)
Prerequisite: GEOG 290 with a minimum grade of "C-"; or consent of instructor
Students will have the opportunity to gain first-hand field experience in particular specialties of geography. The experience is designed for a broad range of field and laboratory-oriented courses of special interest to geography majors and minors. Emphasis on depth or breadth of a selected topic will depend on the objectives of the instructor offering the course. Students will be required to review the background and methods of selected topics and then to design projects to study problems or issues within the scope of the class. Students will be exposed to a range of field techniques including sampling and the use of various types of measurement equipment. Students will work independently and as part of teams. Typically, classes will meet every week for one hour with one credit for a single weekend field expedition and three credits for experiences requiring weekly fieldwork or laboratory experiments throughout the semester. This course is repeatable for up to six credits for different field experiences.

GEOG 497 Undergraduate Research in Geography (3 credits)
Prerequisite: Junior or senior standing and acceptance by the supervising faculty member
Students who are accepted by a faculty member as a participant in an undergraduate field or laboratory research project enroll in this course. Projects entail research in the faculty member's subdivision and are publicized as they become available. Students are extensively involved in experimental planning, execution, analysis and reporting, and present their results to the department.

GEOG 498 Internship in Geography or Planning (3-6 credits)
Prerequisite: Consent of the department; formal application required
Student internships in local planning department or agency. The purpose of this internship is to provide a student with experience in various aspects of his/her planning interest. This course may be repeated for a maximum of six credits. Either semester.

GEOG 499 Directed Study in Geography (1-3 credits)
Prerequisite: Consent of the department; formal application required
Directed study is open to juniors and seniors who have demonstrated critical and analytical abilities in their studies and who wish to pursue a project independently. This course may be taken twice for a maximum of six credits. Offered either semester.

GEOG 504 Online Weather Studies (3 credits)
This is a meteorology course that will cover all major aspects of atmospheric processes, including weather systems from local to global in scale and severe weather. This online course will involve work with current weather maps and data delivered via the Internet, and will coordinate this information to the day's weather. The instructor guides the student in understanding the basic principles of meteorology and
in analyzing real-time weather data. The class meets in a formal classroom three times per semester. A research project is required which is keyed to the background and interests of each student. **Spring semester.**

**GEOG 520  Special Topics in Geography (1-3 credits)**  
*Prerequisite: May be specified depending on the nature of the topic*  
Special topics of current relevance to geography will be offered from time to time. The topic to be offered will be announced prior to registration. This course may be taken more than once for different topics.

**GEOG 551  Geography in the Middle School (3 credits)**  
This course examines in depth the characteristic features of countries on six continents as delineated by the Massachusetts curriculum framework. Course participants will develop the geographic content that can be translatable for classroom use at the middle school level. The purpose of the course is for teachers to develop the necessary knowledge, insights, and teaching approaches so that they can teach, with confidence, about the various regions of the world. The geographic approach used in the course integrates historical, economic, and political issues in order to develop a more comprehensive understanding of our world.

**GEOG 580  The Regional Method in Geographic Analysis (3 credits)**  
This course examines the nature of regionalism as a heuristic device. The purposes and problems of regionalization are explored in a variety of contexts where human and physical phenomena interact. Regions are analyzed and changing social constructs essential for the spatial analysis so central to geographic inquiry. The course examines changing definitions of regionalism from the French compage to the fluid functional regions of contemporary life.

**Geography: Other Approved Courses**

**GEOG 380  Geography of Russia/C.I.S. (3 credits)**  
*Prerequisite: Any 100 level GEOG course*  
The geography of environment, resources and population is studied in relation to history and the present economic and social system of the Russia/C.I.S.  
*Offered alternate years, fall semester.*

**GEOG 382  Geography of Europe (3 credits)**  
*Prerequisite: Any 100 level GEOG course*  
This course covers the character of the natural and cultural environments of the geographic regions of Europe. *Offered once in three years*

**GEOG 502  Research**

**GEOG 503  Directed Study**

**GEOG 550  Contemporary Issues in Geography**

**GEOG 560  Seminar in Geographic Education**

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**GERMAN**

**LAGE 101  Elementary German I (3 credits)**  
*Prerequisite: See the “Departmental Foreign Language Policy” in the “Foreign Languages” section of this catalog*  
An introduction to elementary syntactic, semantic, phonetic and paralinguistic structures is offered. Pertinent everyday cultural concepts are discussed. Relevant comparison and contrast with native language is treated. Functional communication in the second language in a controlled environment is the principal objective of the course. (CGCL; CHUM)

**LAGE 102  Elementary German II (3 credits)**  
*Prerequisite: LAGE 101; or see the “Departmental Foreign Language Policy” in the “Foreign Languages” section of this catalog*  
The further study of elementary syntactic, semantic, phonetic and paralinguistic structures is offered. Pertinent everyday cultural concepts are discussed. Relevant comparison and contrast with the native language is treated. Functional communication in the second language in a controlled environment is the principal objective of the course. (CGCL; CHUM)

**LAGE 151  Intermediate German I (3 credits)**  
*Prerequisite: LAGE 102*  
A review of German grammar with emphasis given to reading, writing, listening and speaking; systematic laboratory practice; and an introduction to German culture. (CHUM, CGCL)
LAGE 199  First Year Seminar (3 credits)
Prerequisite: Open to all freshmen with a writing placement score of 3 or above or a SAT score of 500 or above. Students with 24 or more transfer credits will have this requirement waived.
First Year Seminars (FYS) are writing-intensive, topic courses that introduce students to academic thought, discourse and practices. FYS courses prepare and orient students toward productive and fulfilling college careers by actively engaging them in a specific academic area of interest. Students will improve their writing, reading, research and basic information and technology skills while learning to work both collaboratively and independently. These courses will fulfill the First Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one FYS course may be taken for credit. (CFYS)

LAGE 298  Second Year Seminar (Speaking Intensive) (3 credits)
Prerequisite: _ _ _ _199; Open to all sophomores and juniors who have completed ENGL 101, and the speaking skills requirement. Students with 54 or more transfer credits will have this requirement waived. Cannot be taken if _ _ _ _299 is taken for credit.
Second Year Seminars (SYS) are speaking-intensive, topic courses that build on the academic skills and habits introduced in the First Year Seminar. SYS courses engage students in a specific academic area of interest and provide them with the opportunity to reinforce, share and interpret knowledge. Students will improve their speaking, reading, research and basic information and technology skills while building the connections between scholarship and action that are required for lifelong learning. These courses will fulfill the Second Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one SYS course may be taken for credit. (CSYS)

LAGE 299  Second Year Seminar (Writing Intensive) (3 credits)
Prerequisite: _ _ _ _199; Open to all sophomores and juniors who have completed ENGL 101 and ENGL 102. Students with 54 or more transfer credits will have this requirement waived. Cannot be taken if _ _ _ _298 is taken for credit.
Second Year Seminars (SYS) are writing-intensive, topic courses that build on the academic skills and habits introduced in the First Year Seminar. SYS courses engage students in a specific academic area of interest and provide them with the opportunity to reinforce, share and interpret knowledge. Students will improve their writing, reading, research and basic information and technology skills while building the connections between scholarship and action that are required for lifelong learning. These courses will fulfill the Second Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one SYS course may be taken for credit. (CSYS)

- GRADUATE PROGRAM

GRPP 501  Graduate Program Planning (1 credit)
The planning and development of a coherent program of graduate study appropriate to the student's academic and professional background and objectives. Graduate students who have been accepted into a master's degree or CAGS program should enroll under the direction of their adviser(s) immediately after acceptance by the College of Graduate Studies and prior to enrolling in any additional courses. Graded on a (P) Pass/(N) No Pass basis.

- HEALTH

HEAL 102  Health and Wellness (3 credits)
Attitudes and practices as they influence effective living: common adult health problems; community health standards and services; special problems of community health.

HEAL 135  Freshman Honors Colloquium (1 credit)
Prerequisite: Open to Commonwealth Honors students and to others at the discretion of the instructor
Freshman Honors Colloquia in health allow exceptionally able students to explore a challenging topic in small classes under close faculty supervision. Colloquia meet once a week for 50 minutes and culminate in a paper or scientific project, which provides the major part of the grade. The minimum enrollment is two and the maximum is 12. Topics vary from semester to semester. Fall semester.

HEAL 136  Freshman Honors Colloquium (1 credit)
Prerequisite: Open to Commonwealth Honors students and to others at the discretion of the instructor
Freshman Honors Colloquia in health allow exceptionally able students to explore a challenging topic in small classes under close faculty
supervision. Colloquia meet once a week for 50 minutes and culminate in a paper or scientific project, which provides the major part of the grade. The minimum enrollment is two and the maximum is 12. Topics vary from semester to semester.  

**HEAL 199 First Year Seminar (3 credits)**  
**Prerequisite:** Open to all freshmen with a writing placement score of 3 or above or a SAT score of 500 or above or who have completed ENGL 101. Students with 24 or more transfer credits will have this requirement waived.  
First Year Seminars (FYS) are writing-intensive, topic courses that introduce students to academic thought, discourse and practices. FYS courses prepare and orient students toward productive and fulfilling college careers by actively engaging them in a specific academic area of interest. Students will improve their writing, reading, research and basic information and technology skills while learning to work both collaboratively and independently. These courses will fulfill the First Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one FYS course may be taken for credit. (CFYS)

**HEAL 200 Principles and Practices of Health Education (3 credits)**  
This introductory course is designed to provide students with an in-depth examination of the process and context of health education and health promotion. Students will receive information and resources that will enable them to begin developing the competencies and skills of entry-level health educators.  

**HEAL 210 Issues in Male Health (3 credits)**  
This course will address relevant topics as they pertain to issues in male health. The course will examine issues in male health throughout the lifespan (i.e., from birth until death) and will incorporate various aspects of health ranging from physical and emotional to spiritual and occupational.

**HEAL 286 Sophomore Honors Colloquium (1 credit)**  
**Prerequisite:** Open to Commonwealth Honors students and to others at the discretion of the instructor  
Sophomore Honors Colloquia in Health allow exceptionally able students to explore a challenging topic in small classes under close faculty supervision. Colloquia meet once a week for 50 minutes and culminate in a paper or scientific project, which provides the major part of the grade. The minimum enrollment is two and the maximum is 12. Topics vary from semester to semester.  

**HEAL 287 Sophomore Honors Colloquium (1 credit)**  
**Prerequisite:** Open to Commonwealth Honors students and to others at the discretion of the instructor  
Sophomore Honors Colloquia in Health allow exceptionally able students to explore a challenging topic in small classes under close faculty supervision. Colloquia meet once a week for 50 minutes and culminate in a paper or scientific project, which provides the major part of the grade. The minimum enrollment is two and the maximum is 12. Topics vary from semester to semester.

**HEAL 298 Second Year Seminar (Speaking Intensive) (3 credits)**  
**Prerequisite:** ENGL 199; Open to all sophomores and juniors who have completed ENGL 101, and the speaking skills requirement. Students with 54 or more transfer credits will have this requirement waived. Cannot be taken if _ _ _ _ 299 is taken for credit.  
Second Year Seminars (SYS) are speaking-intensive, topic courses that build on the academic skills and habits introduced in the First Year Seminar. SYS courses engage students in a specific academic area of interest and provide them with the opportunity to reinforce, share and interpret knowledge. Students will improve their speaking, reading, research and basic information and technology skills while building the connections between scholarship and action that are required for lifelong learning. These courses will fulfill the Second Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one SYS course may be taken for credit. (CSYS)

**HEAL 299 Second Year Seminar (Writing Intensive) (3 credits)**  
**Prerequisite:** ENGL 199; Open to all sophomores and juniors who have completed ENGL 101 and ENGL 102. Students with 54 or more transfer credits will have this requirement waived. Cannot be taken if _ _ _ _ 298 is taken for credit.  
Second Year Seminars (SYS) are writing-intensive, topic courses that build on the academic skills and habits introduced in the First Year Seminar. SYS courses engage students in a specific academic area of interest and provide them with the opportunity to reinforce, share and interpret knowledge. Students will improve their writing, reading, research and basic information and technology skills while building the connections between scholarship and action that are required for lifelong learning. These courses will fulfill the Second Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one SYS course may be taken for credit. (CSYS)

**HEAL 300 Current Issues in Health (3 credits)**  
Designed to acquaint the students with current health issues and trends related to the school and community.  

**HEAL 302 American Red Cross Standard First Aid (1 credit)**
The purpose of the American Red Cross Standard First Aid course is to train students to help people in emergencies. This course teaches the standard first aid skills a person needs to act as the first link in the emergency medical service system.

**HEAL 315   School and Community Health (3 credits)**
This course will provide an overview of the fundamental concepts and issues in school and community health and will examine basic community and school health principles. The personal, social, and environmental factors influencing the health of communities and schools will be explored. The course will also examine the historical and structural foundations of community and school health.

**HEAL 385   Epidemiology: The Study of Diseases (3 credits)**
Prerequisite: HEAL 200
Epidemiology is the study of how health and disease are distributed in populations and the factors that influence disease distribution. This course will introduce basic epidemiological methods used in the study of health problems. It will focus on the tools and epidemiologic methods used in identifying, preventing and controlling disease. The course will also examine major chronic and infectious diseases – their etiology, transmission and prevention.

**HEAL 401   Human Sexuality (3 credits)**
This course deals with issues of sexual response, including dysfunction and reproduction. Also included are discussions of sexual styles and expressions as they impact upon the biosocial and political climate of the times. Topics of in-depth analysis may focus upon IVF issues, fertility control and sexually transmitted diseases. May be taken for graduate-level credit.

**HEAL 404   Cultural Diversity in Health and Disease (3 credits)**
Prerequisite: Any 200-level or above health course or consent of instructor
This course is a study of health knowledge, attitudes and behaviors of underserved cultural groups in the society, including but not limited to Native Americans, Hispanics, Latinos and Blacks. The focus is on the influence of cultural differences in health behaviors and practices in the etiology, prevention and treatment of diseases and health conditions. The course addresses the complexities involved in providing culturally appropriate health care and prepares participants to become culturally sensitive.

**HEAL 405   Drugs in Society (3 credits)**
Study of the impact of the environmental and cultural values affecting the drug using population. Views on subculture and alternative life styles and the forces that shape them. Understanding trends of modern treatment facilities and rehabilitation procedures. Emphasis on alternatives to drug use. May be taken for graduate-level credit.

**HEAL 406   Health Behavior Management (3 credits)**
Prerequisite: Any 200-level or above health course or consent of instructor
This course is designed to equip students with concepts of empirically tested theories and strategies of health behavior change and disease management. Selected acute/chronic diseases and health conditions such as diabetes, selected cancer types, metabolic disorders, childhood obesity, chronic respiratory disorders, selected dental and eye diseases, HIV/AIDS, autoimmune disorders, cardiovascular diseases and mental disabilities will be covered.

**HEAL 407   Stress Management (3 credits)**
This course is designed to provide students with an overview of the phenomenon of stress, and its relationship to specific illness, diseases and dysfunctions. The course also provides students with opportunities to practice, apply and demonstrate stress intervention and management techniques. May be taken for graduate-level credit.

**HEAL 420   Women's Health Issues (3 credits)**
This course is designed to provide students with an overview of contemporary women's health topics. Students will explore the various dimensions of women's health – examining the contributing social, cultural, epidemiological, psychological, political and economic influences.

**HEAL 430   Epidemiology and Community Health (3 credits)**
Prerequisite: Junior standing or consent of instructor
Applications of epidemiologic principles to the study of community based health issues including uses in program planning and evaluation. Basic epidemiologic data analysis and sources of community health statistics are also included. May be taken for graduate-level credit.

**HEAL 450   Health Promotion Strategies (3 credits)**
Prerequisite: HEAL 200 and HEAL 451
This course is designed to provide students with the opportunity to study, apply and demonstrate various strategies and techniques
appropriate to the diverse approaches of health education. The focus of the class is on planning and implementing health education and health promotion activities. Spring semester. May be taken for graduate-level credit.

**HEAL 451**  Program Planning in Health Promotion (3 credits)
*Prerequisite: HEAL 200*
This class is designed to give students the tools and skills they need to design conduct, and evaluate health education programs in the various settings for health education. Assessing needs, formulating objectives, session/lesson planning, evaluation purposes, methods and designs will be covered. May be taken for graduate-level credit. (CWRM)

**HEAL 452**  Evaluation and Research in Health Promotion (3 credits)
*Prerequisite: HEAL 451*
This course is designed to give students the tools and skills they need to design and conduct health program research and evaluation. Evaluation research purposes, levels, methods, designs and measurement issues will be covered. Some basic statistics will be included.

**HEAL 471**  Nutrition (3 credits)
This course deals with the relationships between diet and disease prevention, cultural eating patterns, dysfunctional eating behaviors and issues relating to nutrition through the life span, as well as concerns related to food safety and the impact of technology. May be taken for graduate-level credit.

**HEAL 477**  Environmental and Consumer Health (3 credits)
This course will utilize an ecological systems approach to examine current environmental and consumer concerns that affect health. Students will explore the impact of the environment on human health as well as the impact that humans have on the health of the environment. Students will also be provided with the information and skills that will enable them to make healthful and environmentally sound decisions regarding consumer health products, practices and services. May be taken for graduate-level credit.

**HEAL 481**  Selected Health Issues (1-3 credits)
Designed to bring to the educator the latest information regarding selected health issues. Three issues will be offered each time the course is given and experts in the field will be brought in to deal with each topic. Given in modular form for 1-3 credits.

**HEAL 482**  Health Education in the Elementary Schools (3 credits)
*Prerequisite: Admission to the Professional Education Program*
Study of the identification and appraisal of physical, emotional and social health problems of elementary school children. Focus on teachers’ approaches toward health education and the creation of an emotionally, socially and intellectually healthy classroom environment. May be taken for graduate-level credit.

**HEAL 483**  Nutrition and Cardiovascular Health (3 credits)
*Prerequisite: One course in nutrition or a scientifically based course that includes topics of nutrition*
This course will deal with the selection of nutritional foods throughout the life cycle with specific emphasis on how cardiovascular health may be maintained and/or improved by proper nutritional practices. May be taken for graduate-level credit.

**HEAL 484**  Death and Dying Education (3 credits)
A study of the health issues (physical, emotional and social) related to terminal illness and death. May be taken for graduate-level credit.

**HEAL 485**  Medical and Scientific Aspects of Human Sexuality (3 credits)
*Prerequisite: HEAL 401 or consent of instructor*
The purpose of this course is to update the advanced sexuality student on medical research as it relates to human sexuality. Course content may consider such issues as fertility medications, sexual dysfunction, as well as research on variations in sexual styles. Offered alternate years. May be taken for graduate-level credit.

**HEAL 490**  Senior Seminar in Health Education (1 credit)
*Prerequisite: HEAL 200 and HEAL 300 and HEAL 401 and HEAL 405 and HEAL 407 and HEAL 471 and HEAL 477; and HEAL 430 or both HEAL 315 and HEAL 385*
This course serves as a capstone course for health education majors. A review of the concepts and skills addressed in the major courses and their applications to the discipline of health education will serve to prepare students for the National Certified Health Education Specialist exam. Student portfolios will be submitted and assessed. Also included will be a focus on job preparation skills.

**HEAL 491**  Field Based Pre-Practicum in Health (2 credits)
*Prerequisite: Admission to the Professional Education Program*
This course is designed to provide the student with an introduction to teaching health education in an off-campus setting.
HEAL 492 Practicum in Student Teaching – Health (12 credits)
Prerequisite: Acceptance and good standing in teacher preparation program and satisfactorily completed department teacher preparation program courses and admission to the Professional Education Program
Full-time teaching for one semester with supervision provided by members of the department.

HEAL 495 Practicum in Student Teaching – Elementary Health (Health/Family and Consumer Science) (6 credits)
Prerequisite: HEAL 491 and acceptance into student teaching
This course is designed to provide the student with faculty-supervised student-teaching experience in health education with grades K-6. This practicum is full-time for one quarter (8 weeks). Students will be evaluated using standards and guidelines set by AAHE, the Massachusetts Department of Education and the Massachusetts Comprehensive Health Curriculum Framework.

HEAL 496 Practicum in Student Teaching-Secondary Health (Health/Family and Consumer Science) (6 credits)
Prerequisite: HEAL 491 and acceptance into student teaching
This course is designed to provide the student with faculty-supervised student-teaching experience in health education with grades 7-12. This practicum is full-time for one quarter (8 weeks). Students will be evaluated using standards and guidelines set by AAHE, the Massachusetts Department of Education and the Massachusetts Comprehensive Health Curriculum Framework.

HEAL 498 Field Experience in Health (3-15 credits)
Prerequisite: HEAL 451 and a cumulative GPA of 2.8; or consent of the department
A field experience offers qualified students the opportunity to gain practical off-campus experience in health education/promotion. Placements are made in both public and private agencies and are designed to strengthen students' competencies in the CHES (Certified Health Education Specialist) areas of responsibility. This course may be repeated for a maximum of 15 credits.

HEAL 499 Directed Study in Health (1-3 credits)
Prerequisite: Consent of the department; formal application required
Directed study is open to juniors and seniors who have demonstrated critical and analytical abilities in their studies and who wish to pursue a project independently. This course may be taken twice for a maximum of six credits.

HEAL 501 Health Promotion Project (3 credits)
Individual health promotion project is planned, implemented and evaluated under the direct supervision of a faculty mentor.

HEAL 502 Research (3 or 6 credits)
Prerequisite: Consent of the department; formal application required
Original research undertaken by the graduate student in their field. For details, consult the paragraph titled “Directed or Independent Study” in the “College of Graduate Studies” section of this catalog. This course may be repeated for a maximum of six credits.

HEAL 503 Directed Study (1-3 credits)
Prerequisite: Consent of the department; formal application required
Directed study is designed for the graduate student who desires to study selected topics in a specific field. For details, consult the paragraph titled “Directed or Independent Study” in the “College of Graduate Studies” section of this catalog. This course may be repeated for a maximum of six credits.

HEAL 504 Seminar in Health Promotion Theory and Literature (3 credits)
This course is designed to orient the graduate student to the process of a formal literature review and the subsequent theory that ensues. The student will be required to complete a comprehensive literature review and deliver a formal seminar report.

HEAL 508 Health Crisis Intervention (3 credits)
Prerequisite: Six credits in health
Dealing with mental, emotional and social health problems of the individual, the family and society. Exploration of suicide education, death education and psychosomatic illness. Investigation and practice of techniques of aiding the potential suicide; the tripping drug user; the chronic alcoholic; the obese, neurotic, and promiscuous; geriatric problems; and health care availability. Course will consider agency roles in these areas. Offered alternate years.

HEAL 510 Advanced Nutrition Concepts (3 credits)
Prerequisite: HEAL 471 or a nutrition course
An advanced course in nutrition with emphasis on current nutritional concepts and a critical analysis of major nutritional issues.

HEAL 511 Research and Evaluation Methods in Health Promotion (3 credits)
This course will develop competencies needed to both produce and consume research in health promotion and allied areas. Via the development of a research proposal, students will gain an understanding of such research techniques as problem formulation, literature review, sampling, hypothesis construction, research design, instrumentation and data analysis. Fall semester.
HEAL 516  Family Life and Sex Education (3 credits)
Prerequisite: At least one course in human sexuality and consent of instructor
Curriculum development and implementation strategies for comprehensive school/community-based sexuality education. The course deals with a variety of sexuality issues including STDs, fertility and contemporary social issues of sexism and aggression. Offered alternate years.

HEAL 518  Quantitative Methods in Health Promotion and Epidemiology (3 credits)
This is an introductory course in quantitative methods in epidemiology and health promotion. The course includes inferential and descriptive techniques as well as life table construction and epidemiological rates, ratios and proportions.

HEAL 519  Scientific and Philosophical Foundations of Health Promotion (3 credits)
The focus of this course is on surveying and providing the historical/philosophical foundations of health promotion and providing a scientific basis for the development of health promotion programs.

HEAL 520  Designing and Administering Health Promotion Programs (3 credits)
Analysis and skill development in administration of health promotion programs in a variety of settings with emphasis on administrative issues, staff development and consultation.

HEAL 525  Women's Health Issues (3 credits)
This course is designed to provide students with an overview of contemporary women's health topics. Students will explore the various dimensions of women's health, and examine the contributing social, cultural, epidemiological, psychological, political and economic influences.

HEAL 535  Comprehensive Elementary School Health Program (1.5 credits)
Aspects of the comprehensive school health program related to the role of the K-6 classroom teacher will be examined. Spring semester.

HEAL 577  Environmental and Consumer Health (3 credits)
This course will utilize an ecological systems approach to examine current environmental and consumer concerns that affect health. Students will explore the impact of the environment on human health as well as the impact that humans have on the health of the environment. Students will also be provided with the information and skills that will enable them to make healthful and environmentally sound decisions regarding consumer health products, practices and services.

HEAL 581  Special Topics in Health Education (1-3 credits)
Special topics in health education are presented with special emphasis on application in the field. Topics are given in modules of 1-3 credits each. This course may be repeated for different topics.

HEAL 594  Educational Approaches to Changing Drug Use Behavior (3 credits)
Prerequisite: At least one course pertaining to drugs and consent of instructor
The focus of this course is drug abuse problems in youthful populations. The importance of teachers developing their own self-awareness and using early intervention strategies is emphasized. Teachers at the elementary and secondary levels will experience a variety of methodologies intended to equip them with strategies for changing student behaviors in respect to present or intended drug use. All course participants will develop skills in assessing student needs, planning and implementing drug education programs and evaluating their effectiveness in changing attitudes, beliefs, values and behaviors related to drug use. Offered alternate years.

HEAL 595  Internship in Health Promotion (1-6 credits)
Prerequisite: 15 graduate credits must be completed or consent of instructor
An internship offers qualified students the opportunity to gain practical experience within their major area of interest. Placements are designed to complement a student's program focus.

Health: Other Approved Courses

HEAL 455  Promoting Health in the Workplace
HEAL 474  Community Health

- HIGH SCHOOL EDUCATION
(See also EDHM)
HSED 199  First Year Seminar (3 credits)
Prerequisite: Open to all freshmen with a writing placement score of 3 or above or a SAT score of 500 or above or who have completed ENGL 101. Students with 24 or more transfer credits will have this requirement waived.
First Year Seminars (FYS) are writing-intensive, topic courses that introduce students to academic thought, discourse and practices. FYS courses prepare and orient students toward productive and fulfilling college careers by actively engaging them in a specific academic area of interest. Students will improve their writing, reading, research and basic information and technology skills while learning to work both collaboratively and independently. These courses will fulfill the First Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one FYS course may be taken for credit. (CFYS)

HSED 298  Second Year Seminar (Speaking Intensive) (3 credits)
Prerequisite: _____ 199. Open to all sophomores and juniors who have completed ENGL 101, and the speaking skills requirement. Students with 54 or more transfer credits will have this requirement waived. Cannot be taken if _____ 298 is taken for credit.
Second Year Seminars (SYS) are speaking-intensive, topic courses that build on the academic skills and habits introduced in the First Year Seminar. SYS courses engage students in a specific academic area of interest and provide them with the opportunity to reinforce, share and interpret knowledge. Students will improve their speaking, reading, research and basic information and technology skills while building the connections between scholarship and action that are required for lifelong learning. These courses will fulfill the Second Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one SYS course may be taken for credit. (CSYS)

HSED 299  Second Year Seminar (Writing Intensive) (3 credits)
Prerequisite: _____ 199. Open to all sophomores and juniors who have completed ENGL 101 and ENGL 102. Students with 54 or more transfer credits will have this requirement waived. Cannot be taken if _____ 298 is taken for credit.
Second Year Seminars (SYS) are writing-intensive, topic courses that build on the academic skills and habits introduced in the First Year Seminar. SYS courses engage students in a specific academic area of interest and provide them with the opportunity to reinforce, share and interpret knowledge. Students will improve their writing, reading, research and basic information and technology skills while building the connections between scholarship and action that are required for lifelong learning. These courses will fulfill the Second Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one SYS course may be taken for credit. (CSYS)

HSED 412  Strategies for Teaching in the High School - History/Political Science (3 credits)
Prerequisite: EDHM 210 and EDHM 235 and EDHM 335 and admission to the Professional Education Program
Strategies, including methods, materials and media for teaching history/political science in the high school are studied. Developing competency and versatility is stressed through simulations and guided teaching in area high schools. Either semester.

HSED 414  Strategies for Teaching in the High School – English (3 credits)
Prerequisite: EDHM 210 and EDHM 235 and EDHM 335 and admission to the Professional Education Program
Strategies, including methods, materials and media for teaching English in the high school are studied. Developing competency and versatility is stressed through simulations and guided teaching in area high schools. Fall semester.

HSED 422  Strategies for Teaching in the High School – Mathematics (3 credits)
Prerequisite: EDHM 210 and EDHM 235 and EDHM 335 and admission to the Professional Education Program
Strategies, including methods, materials and media for teaching mathematics in the high school are studied. Developing competency and versatility is stressed through simulations and guided teaching in area high schools. Fall semester.

HSED 465  Strategies for Teaching in the High School - Integrated Science (3 credits)
Prerequisite: EDHM 210 and EDHM 235 and EDHM 335 and admission to the Professional Education Program
Strategies, including methods, materials and media for teaching integrated science in the high school are studied. Developing competency and versatility is stressed through simulations and guided teaching in area high schools. Fall semester.

HSED 499  Directed Study in High School Education (1-3 credits)
Prerequisite: Consent of the department
Directed study is open to juniors and seniors who have demonstrated critical and analytical abilities in their studies and who wish to pursue a project independently. This course may be taken twice for a maximum of six credits.

HSED 503  Directed Study (1-3 credits)
Prerequisite: Consent of the department; formal application required
Directed study is designed for the graduate student who desires to study selected topics in a specific field. For details, consult the paragraph titled “Directed or Independent Study” in the “School of Graduate Studies” section of this catalog. This course may be repeated for a maximum of six credits.
HSED 560   Special Topics (3 credits)
Prerequisite: Course prerequisites may be specified depending on the nature of the topic
Special topics of current relevance in education will be offered from time to time. The topic to be addressed will be announced prior to registration. May take more than once with consent of the adviser.

High School Education: Other Approved Courses

HSED 490   Student-Teaching Practicum – High School
HSED 491   Internship in High School Education
HSED 495   High School Practicum
HSED 502   Research

• HISTORY

HIST 111   Western Civilization to the Reformation (3 credits)
The course surveys the major developments from the genesis of Western civilization to the establishment of absolute monarchy. These developments include the Near Eastern, the Graeco-Roman, and the Judeo-Christian traditions of our civilization. Either semester. (CGCL; CHUM; CMCL)

HIST 112   Western Civilization since the Reformation (3 credits)
The course surveys the major developments in Western civilization from the establishment of absolute monarchy to the present. These developments include the evolution of political, economic, social and intellectual aspects of the modern world. Either semester. (CGCL; CHUM; CMCL)

HIST 131   World History to 1500 (3 credits)
This course will survey major issues in the politics, society, culture and economy of human societies around the world, from human evolution to 1500. (CGCL; CHUM; CMCL)

HIST 132   World History since 1500 (3 credits)
This course will survey major issues, events and processes in the politics, society and economy across societies from the world's major regions, from 1500 to present. (CGCL; CHUM; CMCL)

HIST 151   Asian Civilization (3 credits)
An introductory survey of the major Asian civilizations including those of China, Japan, and India. This course presents a historical view of Asian traditions and their modern transformation in the context of East-West interactions. (CGCL; CHUM; CMCL)

HIST 161   History and Culture of Mexico (3 credits)
This course surveys the history of Mexico from the earliest human inhabitation to the present. It will present different interpretations of the major themes and developments in Mexican history: the ancient civilizations of Mesoamerica, the Spanish conquest and colonization, Mexico's struggle for independence from Spain, the development of a unique Mexican culture incorporating Hispanic and indigenous traditions, and the quest for modernization and nationhood through reform and revolution. Special attention will be paid to relations between Mexico and the United States, from the Mexican-American War to NAFTA. (CGCL; CHUM; CMCL; CWRT)

HIST 199   First Year Seminar (3 credits)
Prerequisite: Open to all freshmen with a writing placement score of 3 or above or a SAT score of 500 or above or who have completed ENGL 101. Students with 24 or more transfer credits will have this requirement waived.
First Year Seminars (FYS) are writing-intensive, topic courses that introduce students to academic thought, discourse and practices. FYS courses prepare and orient students toward productive and fulfilling college careers by actively engaging them in a specific academic area of interest. Students will improve their writing, reading, research and basic information and technology skills while learning to work both collaboratively and independently. These courses will fulfill the First Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one FYS course may be taken for credit. (CFYS)

HIST 221   United States History and Constitutions to 1865 (3 credits)
This course examines the development of the nation from the age of exploration to the end of the Civil War. It emphasizes the economic, political, intellectual and social maturing of the United States. Either semester. (CHUM; CUSC)

HIST 222 United States History and Constitutions since 1865 (3 credits)
This course continues the study begun in HIST 221 down to the present. It emphasizes the growth of America as an industrial and world power and the increasing role of government in American life. Either semester. (CHUM; CUSC)

HIST 298 Second Year Seminar (Speaking Intensive) (3 credits)
Prerequisite: _ _ _ _199; Open to all sophomores and juniors who have completed ENGL 101, and the speaking skills requirement. Students with 54 or more transfer credits will have this requirement waived. Cannot be taken if _ _ _ _299 is taken for credit.
Second Year Seminars (SYS) are speaking-intensive, topic courses that build on the academic skills and habits introduced in the First Year Seminar. SYS courses engage students in a specific academic area of interest and provide them with the opportunity to reinforce, share and interpret knowledge. Students will improve their speaking, reading, research and basic information and technology skills while building the connections between scholarship and action that are required for lifelong learning. These courses will fulfill the Second Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one SYS course may be taken for credit. (CSYS)

HIST 299 Second Year Seminar (Writing Intensive) (3 credits)
Prerequisite: _ _ _ _199; Open to all sophomores and juniors who have completed ENGL 101 and ENGL 102. Students with 54 or more transfer credits will have this requirement waived. Cannot be taken if _ _ _ _298 is taken for credit.
Second Year Seminars (SYS) are writing-intensive, topic courses that build on the academic skills and habits introduced in the First Year Seminar. SYS courses engage students in a specific academic area of interest and provide them with the opportunity to reinforce, share and interpret knowledge. Students will improve their writing, reading, research and basic information and technology skills while building the connections between scholarship and action that are required for lifelong learning. These courses will fulfill the Second Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one SYS course may be taken for credit. (CSYS)

HIST 400 The Ancient World: Near East (3 credits)
Prerequisite: HIST 111 or HIST 131
From prehistoric times through the Persian Empire. May be taken for graduate-level credit.

HIST 403 Ancient Greece and the Hellenistic Age (3 credits)
Prerequisite: HIST 111 or HIST 131
A historical survey of Ancient Greece and a comprehensive study of the cultural contributions of the Greeks to western civilization. May be taken for graduate-level credit.

HIST 404 The Ancient World: Rome (3 credits)
Prerequisite: HIST 111 or HIST 131
From its beginnings to the barbarian invasions. May be taken for graduate-level credit.

HIST 406 Rise of Early Christianity (3 credits)
Prerequisite: HIST 111 or HIST 131
This course traces the development of Christian beginnings from the birth of Christ to the Council of Nicaea in A.D. 325. It intends to examine the cultural, social, intellectual, political and religious climate in the Roman Empire out of which Christianity sprang, the problems the early Christians encountered, and the Christian reaction to these problems. May be taken for graduate-level credit.

HIST 410 Latin American Women and Gender History (3 credits)
Prerequisite: One course from two of the following: HIST 111 or HIST 131; HIST 112 or HIST 132; HIST 477 or HIST 478
This course will explore Latin American women's history and gender issues from the Spanish conquest through the present. Special emphasis will be given on the ways that class and race influence women's experiences and on how and why gender was a central component of Latin American social and political development over time.

HIST 414 Politics and Culture in Modern Ireland (3 credits)
Prerequisite: HIST 112 or HIST 132 or consent of instructor
This course explores the social and political history of Ireland from the late 18th century to the present. Particular attention will be given to events such as the Famine, the campaign for Home Rule, the signing of the Anglo-Irish Treaty and the "Troubles" in Northern Ireland.

HIST 415 Europe in the Middle Ages (3 credits)
Prerequisite: HIST 111 or HIST 131
From the fall of Rome to the Renaissance. Offered once in three years. May be taken for graduate-level credit.
HIST 418  Renaissance Europe (3 credits)
Prerequisite: One of the following: HIST 111, HIST 112, HIST 131, HIST 132
This course will begin with an examination of the implications of the commercial revolution in Western Europe and with the rise of the Italian communes and then explore the demographic, social, political, military, cultural, and economic history of western and central Europe during the Renaissance. May be taken for graduate-level credit.

HIST 419  The Reformation and Wars of Religion (3 credits)
Prerequisite: One of the following: HIST 111, HIST 112, HIST 131, HIST 132
This course will examine the causes, conditions and results including domestic and international warfare of the Protestant Reformation and Catholic Reform movement in Europe and its colonies to circa 1648.

HIST 420  Early Modern Europe: Society and Culture (3 credits)
Prerequisite: One of the following: HIST 111, HIST 112, HIST 131, HIST 132
This course will explore the history of European social and economic life, thought, and culture of elites and common folk from the 16th through the 18th centuries.

HIST 421  European Women's History: Medieval Renaissance and Reformation (3 credits)
Prerequisite: HIST 111 or HIST 112; or consent of instructor
This course is an examination of the prescriptive notions of "woman" as well as the varieties of actual historical experiences of women in western European society from the early Middle Ages through the Renaissance and Reformation periods (ca. 500-1650). Offered alternate years. May be taken for graduate-level credit.

HIST 425  British History since 1603 (3 credits)
Prerequisite: HIST 111 or HIST 131
England and its empire to 1815 with stress on parallel developments in American history, including economic and social factors. May be taken for graduate-level credit.

HIST 426  British Empire and Commonwealth since 1815 (3 credits)
Prerequisite: HIST 111 or HIST 131
Political development to the present with emphasis on the rise and fall of the second empire. May be taken for graduate-level credit.

HIST 427  The British Atlantic World: 1500-1800 (3 credits)
Prerequisites: Two of the following: HIST 112 or 132 or 221; or consent of instructor
This course looks at how people from Europe, Africa and the Americas came together in the early modern period, changing the worlds they knew and forging new relationships and institutions. This course will focus on several themes present in the Atlantic world, including cultural encounters, indentured servitude and slavery, commerce and trade, marginal characters, religion and political revolution. Each theme will be covered in a separate section of the class that combines lectures with secondary and primary sources. May be taken for graduate-level credit.

HIST 430  19th-Century Europe (3 credits)
Prerequisite: HIST 111 or HIST 131
From the Napoleonic era to the eve of the First World War. May be taken for graduate-level credit.

HIST 431  20th-Century Europe (3 credits)
Prerequisite: HIST 111 or HIST 131
Particular focus on backgrounds, development, and effects of the two world wars. May be taken for graduate-level credit.

HIST 432  Intellectual History of Modern Europe (3 credits)
Prerequisite: HIST 111 or HIST 131
From the Renaissance to the present. Offered once in three years. May be taken for graduate-level credit.

HIST 434  Modern Russia to 1917 (3 credits)
Prerequisite: HIST 111 or HIST 131
Political, social and economic factors in the history of Russia from the end of the 15th century to the Revolution. May be taken for graduate-level credit.

HIST 435  History of the U.S.S.R. (3 credits)
Prerequisite: HIST 111 or HIST 131
The political, social, intellectual and diplomatic history of the Soviet Union. May be taken for graduate-level credit.

HIST 437  European National Histories (3 credits)
Prerequisite: One of the following: HIST 111, HIST 112, HIST 131, HIST 132
This course will treat an individual nation in the context of Modern European History. The country to be studied will be announced in advance. The course may focus, for example, on France, Germany, Italy, Poland, Portugal or Spain. This course may be repeated for different topics. May be taken for graduate-level credit.

HIST 439   Topics in Non-United States History (3 credits)
Prerequisite: HIST 111 or HIST 131
Varied topics such as the Crusades and Latin American revolutions. This course may be repeated for different topics. Either semester. May be taken for graduate-level credit.

HIST 440   Topics in United States History (3 credits)
Prerequisite: HIST 221 or HIST 222
Varied topics such as the French in New England, history of Boston, American assassinations, the Vietnam War and Abraham Lincoln. This course may be repeated for different topics. Either semester. May be taken for graduate-level credit.

HIST 441   United States History: The Colonial Period 1607-1763 (3 credits)
Prerequisite: HIST 221 or HIST 222
The settlement and growth of the English colonies of America; England's colonial policies; economic and institutional development in the provincial period; the wars with the Native Americans; and the rivalry with the French in America. Offered alternate years. May be taken for graduate-level credit.

HIST 442   United States History: The American Revolution 1763-1787 (3 credits)
Prerequisite: HIST 221 or HIST 222
Background and causes of the American Revolution; the military, social, political and diplomatic aspects of the Revolution. The government under the Articles of Confederation and the problems engendered by the attainment of political independence. Offered alternate years. May be taken for graduate-level credit.

HIST 443   United States History: The Early National Period (3 credits)
Prerequisite: HIST 221 or HIST 222
United States history from the establishment of the Republic to the election of Andrew Jackson. May be taken for graduate-level credit.

HIST 444   Jacksonian Democracy and the Coming of the Civil War (3 credits)
Prerequisite: HIST 221 or HIST 222
The election of Andrew Jackson and the "rise of the common man," the Whig-Democrat rivalry, the Texas question, Manifest Destiny, the rise of abolitionism, and the events leading to the outbreak of the Civil War. May be taken for graduate-level credit.

HIST 445   United States History: The Civil War (3 credits)
Prerequisite: HIST 221 or HIST 222
Background and causes of the Civil War, the military and naval aspects. Civil War music, art, and literature; diplomacy of the Civil War; the home front in the war; the plans for reconstruction; and military reconstruction. Fall semester. May be taken for graduate-level credit.

HIST 448   United States Foreign Relations to 1900 (3 credits)
Prerequisite: HIST 221 or HIST 222
From the American Revolution to 1900. Fall semester. May be taken for graduate-level credit.

HIST 453   United States History: Progressive Era (3 credits)
Prerequisite: HIST 221 or HIST 222
The rise of the Progressive movement in American history to the early 1920s as reflected in politics, government, and the social and intellectual life of the era. Offered alternate years. May be taken for graduate-level credit.

HIST 455   History Study Tour (country to be determined) (3 credits)
Prerequisite: Consent of instructor
This course will offer students a first-hand, supervised crosscultural travel and study experience from a historical perspective. Students will participate in lectures, site visits, research and other academic experiences, including pre- and post-travel activities, as appropriate. Topics focus on historical development of world cultures such as walled cities in Italy and heritage sites in Japan. This course is interdisciplinary in nature, drawing upon perspectives such as visual and performing arts, religious traditions, political organization, economic development and family life. This course may be taken as an elective or an area requirement for history credits.

HIST 456   World War II (3 credits)
Prerequisite: HIST 221 or HIST 222
A study of the global conflict with emphasis on military, diplomatic and political events. *Fall semester. May be taken for graduate-level credit.*

**HIST 457  America since World War II (3 credits)**
*Prerequisite: HIST 221 or HIST 222*
The political, social, cultural and diplomatic development of America since World War II with emphasis on the Cold War, the Civil Rights Movement, and the debate over Welfare State. *May be taken for graduate-level credit.*

**HIST 461  American Immigration and Ethnicity (3 credits)**
*Prerequisite: HIST 221 or HIST 222*
Patterns of migration to the United States with particular emphasis on the 19th and 20th centuries. *Fall semester. May be taken for graduate-level credit.*

**HIST 462  American Labor History (3 credits)**
*Prerequisite: HIST 221 or HIST 222*
The pre-industry and industrial periods. Emphasis on reciprocal relations of workers, immigrants, urbanization and industrialization. *Either semester. May be taken for graduate-level credit.*

**HIST 464  New England Textile Communities: Social and Economic History (3 credits)**
*Prerequisite: HIST 221 or HIST 222*
Social history emphasizing economic, ethnic, labor, political and religious factors during a period when the New England region achieved ascendancy as the nation's foremost cotton textile area. *Offered alternate years. May be taken for graduate-level credit.*

**HIST 465  African-American History (3 credits)**
*Prerequisite: HIST 221 or HIST 222*
From the colonial period through the present. *May be taken for graduate-level credit.*

**HIST 466  Women in American History (3 credits)**
*Prerequisite: HIST 221 or HIST 222*
A history of American women from the colonial period to the present time. Students who elect both HIST 458 and HIST 466 may use only one of these courses to meet the history major requirements. *Offered alternate years. May be taken for graduate-level credit.*

**HIST 471  Sport in American Life (3 credits)**
*Prerequisite: HIST 221 or HIST 222*
The rise of sport in American society, stressing its cultural, economic and social impact since the Civil War. *Spring semester. May be taken for graduate-level credit.*

**HIST 473  Islamic Civilization to 1400 (3 credits)**
*Prerequisite: One of the following: HIST 111, HIST 112, HIST 131, HIST 132, HIST 151*
A survey of Middle Eastern history from the rise of Islam in the seventh century through the Mongol conquests in the 13th century. Coverage will include political, social and religious developments during the formative centuries of Islamic civilization. Topics include the career of the Prophet Muhammad and the origins of the earliest Muslim state; the attempt to create a universal Muslim empire (the Caliphate) and its ultimate collapse; the transmission of knowledge and learning; mystical and sectarian forms of piety and their social and political expressions; forms of household, and the place of slaves, women and non-Muslims in Islamic society; tribes, cities, and the rise of warrior elites; and the popular imagination. Attention will be given to long-term cultural and social continuities between the Islamic and ancient Near East, evolving conceptions of religious and political authority, and the relationship between rules and ruled. *May be taken for graduate-level credit.*

**HIST 475  The Modern Middle East (3 credits)**
*Prerequisite: One of the following: HIST 111, 112, HIST 121, HIST 131, HIST 132*
A survey of Middle Eastern history from 1400 to the present. Topics include the rise and decline of the last Muslim empires, European colonial and imperial penetration of the Middle East in the 19th century, the social and cultural impact of imperialism, the rise of nation-states in the 20th century, nationalist ideologies (e.g. pan-Arabism, Zionism), the emergence of political Islam as a key force, religious sectarianism, and contemporary problems of political and economic development. *May be taken for graduate-level credit.*
HIST 477  Latin America: The Colonial Period (3 credits)
Prerequisite: HIST 111 or HIST 131
Indigenous peoples of the area, exploration and conquest, and institutional development of the empire to the revolts against Spain. May be taken for graduate-level credit.

HIST 478  Latin America: The National Period (3 credits)
Prerequisite: HIST 111 or HIST 131
From the revolutions against Spain to the present. May be taken for graduate-level credit.

HIST 480  History of Imperial China (3 credits)
Prerequisite: HIST 111 or HIST 131
This course will provide an overview of Chinese civilization and society, with an emphasis on the history of late imperial China from the 11th through the 19th centuries. May be taken for graduate-level credit.

HIST 481  China Under Communism (3 credits)
Prerequisite: one of the following: HIST 111, HIST 112, HIST 131, HIST 132, HIST 151, HIST 221, HIST 222
The social, political, and economic transformation of China from an agrarian empire to a revolutionary, socialist nation. May be taken for graduate-level credit.

HIST 482  History of Modern Japan (3 credits)
Prerequisite: HIST 111 or HIST 131
This course will provide an overview of Japan’s transformation from a feudal regime to a modern nation, with an emphasis on the period from 1600 to the present. May be taken for graduate-level credit.

HIST 483  South Asia: The Modern Period (3 credits)
Prerequisite: HIST 111 or HIST 131
Emphasis on colonialism and nationalism in the Indian subcontinent and Vietnam. Fall semester. May be taken for graduate-level credit.

HIST 484  War and Revolution in Modern Asia (3 credits)
Prerequisite: One of the following: HIST 111, HIST 131, HIST 132, HIST 151, HIST 221, HIST 222
This course will examine the revolutionary movements and military conflicts in Asia in the 20th century, with an emphasis on China and Japan. May be taken for graduate-level credit.

HIST 485  Honors Thesis (3 credits)
Prerequisite: Open to Commonwealth and Departmental Honors students
One-hour weekly meetings with the thesis director will culminate in an honors thesis. With the consent of the Departmental Honors Committee and the thesis director, this course may be extended into a second semester for three additional credits depending upon the scope of the project. Whether the final version of the thesis qualifies the student to graduate with honors will be determined by the Departmental Honors Committee. Either semester.

HIST 487  Canadian History to Confederation (3 credits)
Prerequisite: HIST 221 or HIST 222
The land, the native peoples, exploration, patterns of settlement of the French through the Conquest to the development of English institutions. May be taken for graduate-level credit.

HIST 488  Canadian History since Confederation (3 credits)
Prerequisite: HIST 221 or HIST 222
The evolution of an independent Canada from the time of the Confederation. May be taken for graduate-level credit.

HIST 489  History of Canadian-American Relations (3 credits)
Prerequisite: HIST 221 or HIST 222
An analysis of the Canadian efforts to remain friendly with the giant to the south while protecting its political, economic and cultural integrity. Offered once in three years. May be taken for graduate-level credit.

HIST 490  Historical Studies at Oxford (3 credits)
Prerequisite: HIST 111 or HIST 131
Study of selected topics in European History. (This is a special program in England at Oxford University during July. Additional fees are required.) Open to juniors and seniors only. May be taken for graduate-level credit.

HIST 491  Medicine and Society in the North Atlantic World (3 credits)
Prerequisite: One of the following: HIST 111, HIST 112, HIST 131, HIST 132, HIST 221, HIST 222; or consent of instructor
This course explores themes in the social history of health, medicine and gender in the English-speaking North Atlantic world, from the beginning of the 18th century to 1920. The course compares how western societies have conceived of “health” for men and women and examines how the delivery of medical care in these societies changed over time. Specific topics will include changing conceptions of the body, popular healing and medical professionalization. The course includes both lectures and seminars. May be taken for graduate-level credit.

HIST 494 Quebec and Canada since 1867 (3 credits)
Prerequisite: One of the following: HIST 111, HIST 112, HIST 131, HIST 132, HIST 221, HIST 222; or consent of instructor
This course examines the love-hate relationship that emerged between French Canada and English Canada in the years between Confederation and the 1995 referendum on separatism in Quebec. How did francophones and anglophones negotiate coexistence within Canada in these years? What are the main sources of separatist feeling in French Quebec? Themes that will be examined include the economic dominance of English Canada over French Canada, the transformation of Quebeois nationalism, and the importance of language protection to French-Canadian culture. May be taken for graduate-level credit.

HIST 495 Undergraduate History Colloquium (3 credits)
Prerequisite: Two of the following: HIST 111, HIST 112, HIST 131, HIST 132; and HIST 221 and HIST 222
The undergraduate history colloquium is a text and discussion-based, writing-intensive course that focuses on a specific historical topic and relevant historiographical issues, and required development of research skills. This course may be repeated for different topics.

HIST 496 Undergraduate History Seminar (3 credits)
Prerequisite: Two of the following: HIST 111, HIST 112, HIST 131, HIST 132; and HIST 221, HIST 222; or consent of instructor
The undergraduate history seminar is an intensive course in which students will write a major research paper involving original research. Students will present and critique papers on specific historical topics and relevant historiographical literature. This course does not carry graduate credit.

HIST 498 Internship in History (3-6 credits)
Prerequisite: Consent of the department; formal application required
Intended to expose student participants to historical artifacts and primary source materials. Host agencies may include museums and public and private historical organizations. This course may be repeated for a maximum of six credits. Graded on a (P) Pass/(N) No Pass basis. Either semester.

HIST 499 Directed Study in History (1-3 credits)
Prerequisite: Consent of the department; formal application required
Directed study is open to juniors and seniors who have demonstrated critical and analytical abilities in their studies and who wish to pursue a project independently. This course may be taken twice for a maximum of six credits or with an internship program -- combined credit maximum is six. Offered either semester.

HIST 503 Directed Study (1-3 credits)
Prerequisite: Consent of the department; formal application required
Directed study is designed for the graduate student who desires to study selected topics in a specific field. For details, consult the paragraph titled “Directed or Independent Study” in the “College of Graduate Studies” section of this catalog. This course may be repeated for a maximum of six credits.

HIST 540 Topical Seminar: U.S. (3 credits)
This course will stress reading and research in a limited field. Topics will vary each time the course is given and will be announced prior to registration. Limited enrollment. This course may be repeated for different topics.

HIST 545 Topical Seminar: Canada (3 credits)
This course will stress reading and research in a limited field. Topics will vary each time the course is given and will be announced prior to registration. This course may be repeated for different topics.

HIST 550 Topical Seminar: Europe (3 credits)
This course will stress reading and research in a limited field. Topics will vary each time the course is given and will be announced prior to registration. Limited enrollment. This course may be repeated for different topics.

HIST 560 Topical Seminar: Latin America (3 credits)
This course will stress reading and research in a limited field. Topics will vary each time the course is given and will be announced prior to registration. Limited enrollment. This course may be repeated for different topics.
HIST 570  Topical Seminar: Africa (3 credits)
This course will stress reading and research in a limited field. Topics will vary each time the course is given and will be announced prior to registration. Limited enrollment. This course may be repeated for different topics.

HIST 580  Topical Seminar: Asia (3 credits)
This course will stress reading and research in a limited field. Topics will vary each time the course is given and will be announced prior to registration. Limited enrollment. This course may be repeated for different topics.

History: Other Approved Courses

HIST 135  Freshman Honors Colloquium (1 credit)
Prerequisite: Open to Commonwealth Honors students and to others at the discretion of the instructor
Freshman Honors Colloquia in history allow exceptionally able students to explore a challenging topic in small classes under close faculty supervision. Colloquia meet once a week for 50 minutes and culminate in a paper or scientific project, which provides the major part of the grade. The minimum enrollment is two and the maximum is 12. Topics vary from semester to semester. Fall semester.

HIST 136  Freshman Honors Colloquium (1 credit)
Prerequisite: Open to Commonwealth Honors students and to others at the discretion of the instructor
Freshman Honors Colloquia in history allow exceptionally able students to explore a challenging topic in small classes under close faculty supervision. Colloquia meet once a week for 50 minutes and culminate in a paper or scientific project, which provides the major part of the grade. The minimum enrollment is two and the maximum is 12. Topics vary from semester to semester. Spring semester.

HIST 286  Sophomore Honors Colloquium (1 credit)
Prerequisite: Open to Commonwealth Honors students and to others at the discretion of the instructor
Sophomore Honors Colloquia in history allow exceptionally able students to explore a challenging topic in small classes under close faculty supervision. Colloquia meet once a week for 50 minutes and culminate in a paper or scientific project, which provides the major part of the grade. The minimum enrollment is two and the maximum is 12. Topics vary from semester to semester. Fall semester.

HIST 287  Sophomore Honors Colloquium (1 credit)
Prerequisite: Open to Commonwealth Honors students and to others at the discretion of the instructor
Sophomore Honors Colloquia in history allow exceptionally able students to explore a challenging topic in small classes under close faculty supervision. Colloquia meet once a week for 50 minutes and culminate in a paper or scientific project, which provides the major part of the grade. The minimum enrollment is two and the maximum is 12. Topics vary from semester to semester. Spring semester.

HIST 338  Honors Tutorial (3 credits)
Prerequisite: Consent of the department
Special topics in history. Open to Commonwealth and departmental honors students. Three hourly meetings weekly. Fall semester.

HIST 339  Honors Tutorial (3 credits)
Prerequisite: Consent of the department
Special topics in history. Open to Commonwealth and departmental honors students. Three hourly meetings weekly. Spring semester.

HIST 408  Jews and Christians in the Ancient Roman World
HIST 429  The French Revolution and the Napoleonic Era
HIST 433  Modern European Imperialism
HIST 436  History of East-Central Europe since 1918 (3 credits)
Prerequisite: HIST 111 or HIST 131
The political, social, economic, cultural and intellectual history of Austria, Hungary, Czechoslovakia and Poland during the interwar period and that of the Socialist Republics (Hungary, Czechoslovakia, Poland and East Germany) from the Second World War to 1989. Offered once in three years. May be taken for graduate-level credit.

HIST 493  Museum Management: A Practicum
HIST 502  Research

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INSTRUCTIONAL TECHNOLOGY
INST 502  Research (3 or 6 credits)
Prerequisite: Consent of the department; formal application required
Original research undertaken by the graduate student in their field. For details, consult the paragraph titled “Directed or Independent Study” in the “College of Graduate Studies” section of this catalog. This course may be repeated for a maximum of six credits.

INST 503  Directed Study (1-3 credits)
Prerequisite: Consent of the department; formal application required
Directed study is designed for the graduate student who desires to study selected topics in a specific field. For details, consult the paragraph titled “Directed or Independent Study” in the “College of Graduate Studies” section of this catalog. This course may be repeated for a maximum of six credits.

INST 509  Foundations of Instructional Technology (3 credits)
Prerequisite: Working knowledge of Windows, Macintosh platform, and MS Office
The history, current practices and future directions of the instructional technology field provide a framework for student-creation of teaching and learning tools. Presentation, collaboration and multimedia become vehicles for learning as students probe the role of technology within the PreK-12 environment or professional setting for adult learners.

INST 521  Current Applications and Integration (3 credits)
Prerequisite: INST 509 or consent of instructor
Students will explore the application and integration of electronic tools in instructional settings. Collaborative environments, electronic assessment tools and authoring systems will be applied to foster the further development of PreK-12 teaching and learning. Emphasis will be placed on the integration of technology into the curriculum.

INST 522  Instructional Design (3 credits)
Prerequisite: INST 509 or consent of instructor
Using a systematic approach, students will design, develop, evaluate and revise instruction to meet defined goals and objectives. Contemporary theories of learning become the framework and catalyst for the design process.

INST 523  Information Access and the Internet (3 credits)
This course provides continued development in the use of telecommunications and the Internet. Advanced hands-on practice in using the Internet, ethical and legal issues related to responsible classroom use of the Internet and a wide variety of curriculum connections will be explored.

INST 524  Technology Leadership (3 credits)
Procedures for the establishment or continued development of an instructional technology program for the PreK-12 environment or the professional setting for adult learners will be the focus of this course. Candidates will learn the roles and responsibilities of the technology leader: vision, strategic planning, budget development, equity, purchasing, staff developments, technology practices and program evaluation. The history, current practices and future directions of the instructional technology field provide a framework for student-creation of teaching and learning tools. Presentation, collaboration and multimedia become the vehicles for learning as students probe the role of technology within the PreK-12 environment or the professional setting for adult learners.

INST 525  Emergent Technology and Learning Environments (3 credits)
Prerequisite: INST 509
Students will explore new and emerging technologies and construct the philosophical framework for how these technologies can be integrated into the PreK-12 environment or the professional setting for adult learners. Planning, diffusion of innovation and the educational change process will be discussed. Currently, the technologies that will be studied include those related to virtual reality, robotics, decentralized systems, intelligent agents and evolving distance education.

INST 526  Making Connections: Networking (3 credits)
This course studies the application of networking concepts related to the management of local area networks. Topics related to repair, setup, management and maintenance of local area networks in the PreK-12 environment or the professional setting for adult learners are included.

INST 529  Assistive Technology (3 credits)
This course is designed to help students gain the skills needed to assist teachers, administrators and parents in the selection, evaluation and use of adaptive/assistive technologies (AT) that provide access for all students to achieve educational goals. Students will learn about
the continuum of AT devices from low-tech to high-tech, universal design for learning, curriculum adaptation, integration strategies, assessment and evaluation protocols.

**INST 551 Home Pages for Educators (3 credits)**
This course will provide students with a thorough look at important Web sites for educational use; in-depth skills in effectively utilizing search engine strategies for students; the tools and methodology necessary to create a content-rich Web site for school; effective ways to link the vast resources of the Internet to curriculum content; a multidisciplinary model for Internet curriculum integration; the information and tools needed to critically evaluate a Web page (students will evaluate the critical elements that must be present to give credibility to a page); strategies for utilizing the Internet and Web page use, construction, and curriculum development as an integral part of curriculum design; the implications of utilizing the Internet and a school's Web page to publish student work; and the background in the moral, legal and ethical considerations of Internet use and Web page development in the schools and how to translate this knowledge into effective school policy.

**INST 552 Multimedia for Educators (3 credits)**
The course will provide an introduction to multimedia. The power of multimedia allows the teacher to be a developer of software or to facilitate student development of software. The focus will be on good multimedia design, the user and evaluation. Incorporation of media such as video, sound and graphics will also be included.

**INST 560 Topics in Instructional Technology (1-3 credits)**
Special topics of current relevance in instructional technology education will be offered from time to time. The topic to be addressed will be announced prior to registration. May be taken more than once with the consent of the student's adviser.

**INST 590 Seminar in Instructional Technology: Research and Analysis (3 credits)**
**Prerequisite:** EDMC 530 and a minimum of 15 credit hours in instructional technology; familiarity with Blackboard strongly recommended
This course will build on the knowledge obtained in EDMC 530 The Teacher as Researcher and all other courses taken toward the degree. Students will examine major issues and problems within the instructional technology field including, but not limited to, achievement, motivation, access and equity. In this course, students will develop a research project pertaining to the implementation or integration of instructional technology into the teaching and learning process in the PreK-12 environment or the professional setting for adult learners.

**INST 595 Advanced Research Seminar (3 credits)**
**Prerequisite:** INST 590 and acceptance into the MEd in Instructional Technology program; satisfactory completion of program requirements; and approval from the Bridgewater State University Institutional Review Board (IRB); and consent of the instructional technology coordinator
Effective leadership in instructional technology requires the ability to make research-based decisions. In this course, students will "learn by doing" as each student completes an original research study on a topic of current relevance identified during the INST 590 research design. Students will grapple with the challenges and complexities of real-life data collection and analysis, discover the limitations of their research and develop the research writing skills required to convey their findings and implications to stakeholders in a clear, concise manner.

**INST 596 Clinical Experience (3 or 6 credits)**
**Prerequisite:** Acceptance and retention in the Professional Education Program, satisfactory completion of program requirements, and consent of the instructional technology coordinator
During the clinical experience, the student is employed in the role of an Instructional Technology Specialist in a PreK-12 school setting under appropriate school and college supervision. The clinical experience is a full semester consisting of at least 150 clock hours (three credits) for those who hold a standard teaching certificate, and 300 hours (six credits) for students who hold the minimum provisional with advanced standing teaching certificate. If the student is not employed, he/she will be placed full-time in an appropriate school setting under the direction of a qualified practitioner and university supervisor.

**Instructional Technology: Other Approved Courses**

**INST 500 Introduction to Instructional Technology (3 credits)**
**Prerequisite:** Working knowledge of Windows and Macintosh platforms
This course is designed to help students explore how instructional technology can be used for teaching and learning. This course has two primary goals: 1) to provoke ideas about ways computers can be used in school and non-school settings to enhance teaching and learning and 2) to gain experience with software and technology as teaching tools.
INTD 150  Learning Community (1 credit)
Prerequisite: Consent of instructor
Learning communities are designed to involve students in collective experiences that enhance their academic work. Although the subject of the learning community may vary, all student participants will focus on a particular topic, will hold regular meetings with faculty and will engage in community service activities and other events outlined by faculty at the beginning of the course. This course is graded on a (P) Pass/(N) No Pass basis. Addenda: This course has been changed effective spring 2012. See the Catalog Addenda section of this publication for detailed information.

INTD 199  First Year Seminar (3 credits)
Prerequisite: Open to all freshmen with a writing placement score of 3 or above or a SAT score of 500 or above or who have completed ENGL 101. Students with 24 or more transfer credits will have this requirement waived.
First Year Seminars (FYS) are writing-intensive, topic courses that introduce students to academic thought, discourse and practices. FYS courses prepare and orient students toward productive and fulfilling college careers by actively engaging them in a specific academic area of interest. Students will improve their writing, reading, research and basic information and technology skills while learning to work both collaboratively and independently. These courses will fulfill the First Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one FYS course may be taken for credit. (CFYS)

INTD 200  Introduction to Canadian Studies (3 credits)
An interdisciplinary course, which acts as the initial course for the general student and for those wishing to pursue a track in Canadian Studies. The following areas are included: anthropology, art, economics, education, English, French, geography, government, history, music, religion, sociology and theater. Fall semester. (CGCL; CSOC)

INTD 220  Introduction to American Studies (3 credits)
Sophomores should enroll in this interdisciplinary course, which is the initial course for the minor in American Studies. The course aims to examine from several perspectives one problem or period in the American experience. The topic, to be announced before registration, changes from year to year. Disciplines involved include: English, history, art, philosophy, political science and others.

INTD 236  Games and Sport of Arctic People (3 credits)
Cross Listed with PHED 236
A historical and philosophical study of the games and sport of traditional Arctic people, including an overview of the cultural attributes that inform the above.

INTD 240  Critical Perspectives in Women's and Gender Studies (3 credits)
Cross Listed with WMST 240
This course introduces students to the historical background and theoretical frameworks of women's studies. Central to the course is an analysis of the range of feminist scholarship, and the intersections of gender, race, class and sexuality. Students will examine contemporary issues in women's studies and the implications of feminist thought for society and the individual. Spring semester. (CHUM; CMCL; CWRT)

INTD 265  Introduction to GLBT Studies (3 credits)
This course will acquaint students with the great range of the interdisciplinary field called GLBT Studies, showing how non-normative sexualities shape our notions of kinship, personal identity, politics, law and cultural production. Major topics will include the history of sexuality, sexual psychology, cultural constructions of sexual identity, homophobia and heterosexism, gender crossings, the closet, Stonewall, the gay liberation movement, AIDS and same-sex marriage. (CMCL)

INTD 298  Second Year Seminar (Speaking Intensive) (3 credits)
Prerequisite: _ _ _ _199; Open to all sophomores and juniors who have completed ENGL 101, and the speaking skills requirement. Students with 54 or more transfer credits will have this requirement waived. Cannot be taken if _ _ _ _299 is taken for credit.
Second Year Seminars (SYS) are speaking-intensive, topic courses that build on the academic skills and habits introduced in the First Year Seminar. SYS courses engage students in a specific academic area of interest and provide them with the opportunity to reinforce, share and interpret knowledge. Students will improve their speaking, reading, research and basic information and technology skills while building the connections between scholarship and action that are required for lifelong learning. These courses will fulfill the Second Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one SYS course may be taken for credit. (CSYS)

INTD 299  Second Year Seminar (Writing Intensive) (3 credits)
Prerequisite: _ _ _ _199; Open to all sophomores and juniors who have completed ENGL 101 and ENGL 102. Students with 54 or more transfer credits will have this requirement waived. Cannot be taken if _ _ _ _298 is taken for credit.

Second Year Seminars (SYS) are writing-intensive, topic courses that build on the academic skills and habits introduced in the First Year Seminar. SYS courses engage students in a specific academic area of interest and provide them with the opportunity to reinforce, share and interpret knowledge. Students will improve their writing, reading, research and basic information and technology skills while building the connections between scholarship and action that are required for lifelong learning. These courses will fulfill the Second Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one SYS course may be taken for credit. (CSYS)

**INTD 338 Honors Tutorial (3 credits)**
Prerequisites: Open to Commonwealth Honors students at the junior and senior levels; completion of three Honors Colloquia and attainment of an overall GPA of at least 3.3
Special topics of an interdisciplinary nature. Three hourly meetings weekly. *Fall semester.*

**INTD 339 Honors Tutorial (3 credits)**
Prerequisites: Open to Commonwealth Honors students at the junior and senior levels; completion of three Honors Colloquia and attainment of an overall GPA of at least 3.3
Special topics of an interdisciplinary nature. Three hourly meetings weekly. *Spring semester.*

**INTD 349 Perspectives on the Holocaust (3 credits)**
Cross Listed with COMM/PSYC 349
Prerequisite: PSYC 100 and COMM 130
This course introduces students to the study of the Holocaust. It examines the atmosphere and events that allowed the systematic extermination of 11 million non-combatants, including six million Jews. Multidisciplinary in approach, the course draws principally upon psychology and communication studies. Additionally, a variety of social science perspectives are utilized. Recommended for juniors and seniors. *Offered once each year.*

**INTD 355 Latin American/Caribbean Study Tour (3 credits)**
Prerequisite: Consent of instructor
This course offers students opportunities to travel and learn in a supervised study tour experience led by a member of the Latin American and Caribbean studies program faculty. Students will be required to complete the study tour academic program and travel requirements. This course may be repeated. *Offered periodically.*

**INTD 420 American Studies Seminar (3 credits)**
Interdisciplinary topics, which change from year to year, will be developed in a small group, seminar setting. Juniors and seniors in the program will enroll in this seminar twice, studying two different topics for a total of six hours.

**INTD 442 Gender and Community Activism (3 credits)**
Prerequisite: INTD 240 or consent of instructor
This class combines community service with classroom instruction, focusing on critical, reflective thinking as well as personal and civic responsibility around salient gender issues. The course will involve activities that address local needs while developing academic skills and commitment to the community. As such, it turns knowledge into action by completing service-learning projects with community partners. In the classroom, students learn theories and methods of analyzing gender roles historically and in contemporary society, examining the importance of activism on behalf of women, men and GLBTQ persons.

**INTD 485 Honors Thesis (3 credits)**
Prerequisites: Open to Commonwealth Honors students; completion of three Honors Colloquia and attainment of an overall GPA of at least 3.3
One-hour weekly meetings with the thesis director, normally a member of the student's major department, will culminate in an honors thesis. Whether the final version of the thesis qualifies the student to graduate with Commonwealth Honors will be determined by the student's Ad Hoc Commonwealth Honors Thesis Committee. May be repeated. *Either semester.*

**INTD 499 Directed Study (1-3 credits)**
Prerequisites: Consent of department; formal application required
Directed study is open to juniors and seniors who have demonstrated critical and analytical abilities in their studies and who wish to pursue a project independently. This course may be taken twice for a maximum of six credits. *Offered either semester.*

**INTD 501 Contemporary Women's and Gender Studies (3 credits)**
This course introduces graduate students in the Women's and Gender Studies Graduate Certificate Program to the wealth of scholarship available across participating women's and gender studies disciplines, and to encourage development of critical analytical skills in
assessing these sources. The twin fields of women and gender studies are rich and diverse, containing controversy and ongoing debates around the major questions and appropriate answers concerning gender differences and inequalities. This course approaches the fields of women and gender studies through a series of selected but interrelated topics. Students will be exposed to a lecture from one of the fields represented by the program and engage in in-depth discussion.

INTD 590 Seminar in U.S. Education for International Students (3 credits)
This course considers the role of a non-U.S. students living and going to school in the U.S. It will explore American culture in relation to the unique experience of each international student. In addition, education in America, including special education and related legislation will be closely examined. It will offer concepts to assist participants in assimilation to their environment and foster an understanding of the learning environment in U.S. colleges, schools and communities. Issues such as academic regulations, the U.S. educational system, individual educational and vocational goals, communication skills, and U.S. customs will be explored. In this course students attending BSU from other countries will share their experiences with traditional BSU students in order to enhance their life on campus. Partnership experiences will be fostered through classroom activities as well as field trips to museums, cultural activities in and around Boston, and events on campus.

Interdisciplinary: Other Approved Courses

INTD 211 History and Literature of Western Civilization I (3 credits)
Prerequisite: Enrollment in Commonwealth Honors and consent of instructors
A study of selected historical and literary documents, which shaped and in turn were formed by the civilization of the West. The course will focus on the classical, medieval and early renaissance periods and will be taught by two instructors, one from the Department of History and one from the Department of English.

INTD 216 Introduction to Irish-American Studies (3 credits)
This course presents an interdisciplinary overview of the history, culture, and identity of the Irish in America. The following areas are included: art, education, English, government, history, music, religion, sociology and theater. Offered alternate years.

INTD 250 Introduction to Multimedia (3 credits)
Prerequisites: A familiarity with either Windows or the Macintosh system
The components of multimedia, text, graphics, sound, animation and video, will be studied as parts of a cohesive whole, integrated through the computer. Attention will be given to aspects of effective screen design and navigation structures. Various types of multimedia applications will be examined.

INTD 270 The Internet and the Web (3 credits)
Prerequisite: A familiarity with either Windows or the Macintosh system
This course will provide an introduction to some of the basic tools needed to navigate the Internet and to retrieve information from Internet sites. Tools covered include e-mail, telnet, ftp, gopher, listserv and the World Wide Web. The course will also include a look at the history of the Internet. In addition, students will learn HTML, the language of the World Wide Web, in order to create effective Web pages. Aspects of page design and navigational design will be included.

INTD 350 Soil Identification and Interpretation

INTD 416 Irish-American Seminar

- ITALIAN

LAIT 101 Elementary Italian I (3 credits)
An introduction to elementary syntactic, semantic, phonetic and paralinguistic structures is offered. Pertinent everyday cultural concepts are discussed. Relevant comparison and contrast with the native language is treated. Functional communication in the second language in a controlled environment is the principal objective of the course. Note: See the “Departmental Foreign Language Policy” in the “Foreign Languages” section of this catalog. (CGCL; CHUM)

LAIT 102 Elementary Italian II (3 credits)
Prerequisite: LAIT 101; or see the “Departmental Foreign Language Policy” in the “Foreign Languages” section of this catalog
The further study of elementary syntactic, semantic, phonetic and paralinguistic structures is offered. Pertinent everyday cultural concepts are discussed. Relevant comparison and contrast with the native language is treated. Functional communication in the second language in a controlled environment is the principal objective of the course. (CGCL; CHUM)
LAIT 199  First Year Seminar (3 credits)
Prerequisite: Open to all freshmen with a writing placement score of 3 or above or a SAT score of 500 or above. Students with 24 or more transfer credits will have this requirement waived.
First Year Seminars (FYS) are writing-intensive, topic courses that introduce students to academic thought, discourse and practices. FYS courses prepare and orient students toward productive and fulfilling college careers by actively engaging them in a specific academic area of interest. Students will improve their writing, reading, research and basic information and technology skills while learning to work both collaboratively and independently. These courses will fulfill the First Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one FYS course may be taken for credit. (CFYS)

LAIT 298  Second Year Seminar (Speaking Intensive) (3 credits)
Prerequisite: LAIT 199; Open to all sophomores and juniors who have completed ENGL 101, and the speaking skills requirement. Students with 54 or more transfer credits will have this requirement waived. Cannot be taken if LAIT 299 is taken for credit.
Second Year Seminars (SYS) are speaking-intensive, topic courses that build on the academic skills and habits introduced in the First Year Seminar. SYS courses engage students in a specific academic area of interest and provide them with the opportunity to reinforce, share and interpret knowledge. Students will improve their speaking, reading, research and basic information and technology skills while building the connections between scholarship and action that are required for lifelong learning. These courses will fulfill the Second Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one SYS course may be taken for credit. (CSYS)

LAIT 299  Second Year Seminar (Writing Intensive) (3 credits)
Prerequisite: LAIT 199; Open to all sophomores and juniors who have completed ENGL 101 and ENGL 102. Students with 54 or more transfer credits will have this requirement waived. Cannot be taken if LAIT 298 is taken for credit.
Second Year Seminars (SYS) are writing-intensive, topic courses that build on the academic skills and habits introduced in the First Year Seminar. SYS courses engage students in a specific academic area of interest and provide them with the opportunity to reinforce, share and interpret knowledge. Students will improve their writing, reading, research and basic information and technology skills while building the connections between scholarship and action that are required for lifelong learning. These courses will fulfill the Second Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one SYS course may be taken for credit. (CSYS)

Italian: Other Approved Courses
LAIT 151  Intermediate Italian I
LAIT 252  Reading in Italian

Japanese:

LAJA 101  Elementary Japanese I (3 credits)
An introduction to elementary syntactic, semantic, phonetic and paralinguistic structures is offered. Pertinent everyday cultural concepts are discussed. Relevant comparison and contrast with the native language is treated. Functional communication in the second language in a controlled environment is the principal objective of the course. Note: See the “Departmental Foreign Language Policy” in the “Foreign Languages” section of this catalog. (CGCL; CHUM)

LAJA 102  Elementary Japanese II (3 credits)
Prerequisite: LAJA 101 or see the “Departmental Foreign Language Policy” in the “Foreign Languages” section of this catalog
The further study of elementary syntactic, semantic, phonetic and paralinguistic structure is offered. Pertinent everyday cultural concepts are discussed. Relevant comparison and contrast with the native language is treated. Functional communication in the second language in a controlled environment is the principal objective of the course. (CGCL; CHUM)

LAJA 172  Business Japanese (3 credits)
Prerequisite: LAJA 151 or equivalent

LAJA 199  First Year Seminar (3 credits)
Prerequisite: Open to all freshmen with a writing placement score of 3 or above or a SAT score of 500 or above. Students with 24 or more transfer credits will have this requirement waived.
First Year Seminars (FYS) are writing-intensive, topic courses that introduce students to academic thought, discourse and practices. FYS courses prepare and orient students toward productive and fulfilling college careers by actively engaging them in a specific academic area of interest. Students will improve their writing, reading, research and basic information and technology skills while learning to work both collaboratively and independently. These courses will fulfill the First Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one FYS course may be taken for credit. (CFYS)

**LAJA 298 Second Year Seminar (Speaking Intensive) (3 credits)**  
Prerequisite: _ _ _ _199; Open to all sophomores and juniors who have completed ENGL 101, and the speaking skills requirement. Students with 54 or more transfer credits will have this requirement waived. Cannot be taken if _ _ _ _299 is taken for credit.  
Second Year Seminars (SYS) are speaking-intensive, topic courses that build on the academic skills and habits introduced in the First Year Seminar. SYS courses engage students in a specific academic area of interest and provide them with the opportunity to reinforce, share and interpret knowledge. Students will improve their speaking, reading, research and basic information and technology skills while building the connections between scholarship and action that are required for lifelong learning. These courses will fulfill the Second Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one SYS course may be taken for credit. (CSYS)

**LAJA 299 Second Year Seminar (Writing Intensive) (3 credits)**  
Prerequisite: _ _ _ _199; Open to all sophomores and juniors who have completed ENGL 101 and ENGL 102. Students with 54 or more transfer credits will have this requirement waived. Cannot be taken if _ _ _ _299 is taken for credit.  
Second Year Seminars (SYS) are writing-intensive, topic courses that build on the academic skills and habits introduced in the First Year Seminar. SYS courses engage students in a specific academic area of interest and provide them with the opportunity to reinforce, share and interpret knowledge. Students will improve their writing, reading, research and basic information and technology skills while building the connections between scholarship and action that are required for lifelong learning. These courses will fulfill the Second Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one SYS course may be taken for credit. (CSYS)

Japanese: Other Approved Courses

**LAJA 151 Intermediate Japanese**

- LANGUAGES - GENERAL

**LANG 199 First Year Seminar (3 credits)**  
Prerequisite: Open to all freshmen with a writing placement score of 3 or above or a SAT score of 500 or above or who have completed ENGL 101. Students with 24 or more transfer credits will have this requirement waived.  
First Year Seminars (FYS) are writing-intensive, topic courses that introduce students to academic thought, discourse and practices. FYS courses prepare and orient students toward productive and fulfilling college careers by actively engaging them in a specific academic area of interest. Students will improve their writing, reading, research and basic information and technology skills while learning to work both collaboratively and independently. These courses will fulfill the First Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one FYS course may be taken for credit. (CFYS)

**LANG 298 Second Year Seminar (Speaking Intensive) (3 credits)**  
Prerequisite: _ _ _ _199; Open to all sophomores and juniors who have completed ENGL 101, and the speaking skills requirement. Students with 54 or more transfer credits will have this requirement waived Cannot be taken if _ _ _ _299 is taken for credit.  
Second Year Seminars (SYS) are speaking-intensive, topic courses that build on the academic skills and habits introduced in the First Year Seminar. SYS courses engage students in a specific academic area of interest and provide them with the opportunity to reinforce, share and interpret knowledge. Students will improve their speaking, reading, research and basic information and technology skills while building the connections between scholarship and action that are required for lifelong learning. These courses will fulfill the Second Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one SYS course may be taken for credit. (CSYS)

**LANG 299 Second Year Seminar (Writing Intensive) (3 credits)**  
Prerequisite: _ _ _ _199; Open to all sophomores and juniors who have completed ENGL 101 and ENGL 102. Students with 54 or more transfer credits will have this requirement waived. Cannot be taken if _ _ _ _298 is taken for credit.  
Second Year Seminars (SYS) are writing-intensive, topic courses that build on the academic skills and habits introduced in the First Year
Seminar. SYS courses engage students in a specific academic area of interest and provide them with the opportunity to reinforce, share and interpret knowledge. Students will improve their writing, reading, research and basic information and technology skills while building the connections between scholarship and action that are required for lifelong learning. These courses will fulfill the Second Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one SYS course may be taken for credit. (CSYS)

**LANG 300  Languages of the World (3 credits)**

*Prerequisite:* Students must have completed two of the following western civilization courses: HIST 111 or HIST 112 or HIST 124 or HIST 131 or HIST 132; or completed one of those western civilization courses and one of the following: HIST 221 or HIST 222

This course will analyze the diversity of language systems and their fundamental similarities. Students will examine their own beliefs about language and language use. Movements of languages and language families across the globe will add historical and social perspective. (CGCL; CHUM)

**LANG 350  International Women's Cinema (3 credits)**

This course explores international women's cinema that spans a spectrum of cultures, races, ethnicities, sexualities, languages and visual aesthetics. The diverse ways in which women directors enlist cinematic art to articulate and debate such issues as differences between non-Western and Western cultural representations and perceptions of female bodies and body image; explorations of gender, race, and class; varying notions about feminism within non-Western and Western cultures; experimental, documentary, and feature film techniques that challenge cinematic patriarchalism and racism; globalization, technology, and women's lives in the new millennium; and more will be explored. (CHUM; CMCL)

**LANG 485  Honors Thesis (3 credits)**

*Prerequisite:* Open to Commonwealth and Departmental Honors students

One-hour weekly meetings with the thesis director will culminate in an honors thesis. With the consent of the departmental honors committee and the thesis director, this course may be extended into a second semester for three additional credits depending upon the scope of the project. Whether the final version of the thesis qualifies the student to graduate with honors will be determined by the departmental honors committee.

**LANG 498  Internship in Foreign Languages (3-15 credits)**

*Prerequisite:* 24 credits in Spanish major; consent of the department; formal application required

An off-campus experience to expand the cultural and occupational potential of the student using a foreign language in a working environment. A maximum of three credits may be substituted for one course in major with departmental approval. This course may be repeated for a maximum of 15 credits. Graded on a (P) Pass/(N) No Pass basis.

**LANG 499  Directed Study in Foreign Language (1-3 credits)**

*Prerequisite:* Consent of the department

Directed study is open to juniors and seniors who have demonstrated critical and analytical abilities in their studies and who wish to pursue a project independently. This course may be taken twice for a maximum of six credits.

**Languages - General: Other Approved Courses**

LANG 135  Freshman Honors Colloquium
LANG 136  Freshman Honors Colloquium
LANG 286  Sophomore Honors Colloquium
LANG 287  Sophomore Honors Colloquium
LANG 338  Honors Tutorial
LANG 339  Honors Tutorial
LANG 502  Research
LANG 503  Directed Study
LANG 560  Special Topics in Foreign Languages

**LIBRARY MEDIA STUDIES**

LIBR 102  Introduction to Information Resources (1 credit)
This course introduces the use of information resources, especially at the Maxwell Library, in order to attain an ability to work with the research tools and to know the services that are available. *Either semester.*

**LIBR 199  **First Year Seminar (3 credits)**
Prerequisite: Open to all freshmen with a writing placement score of 3 or above or a SAT score of 500 or above or who have completed ENGL 101. Students with 24 or more transfer credits will have this requirement waived.*
First Year Seminars (FYS) are writing-intensive, topic courses that introduce students to academic thought, discourse and practices. FYS courses prepare and orient students toward productive and fulfilling college careers by actively engaging them in a specific academic area of interest. Students will improve their writing, reading, research and basic information and technology skills while learning to work both collaboratively and independently. These courses will fulfill the First Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one FYS course may be taken for credit. (CFYS)

**LIBR 298  **Second Year Seminar (Speaking Intensive) (3 credits)**
Prerequisite: _ _ _ _ 199; Open to all sophomores and juniors who have completed ENGL 101, and the speaking skills requirement.*
Second Year Seminars (SYS) are speaking-intensive, topic courses that build on the academic skills and habits introduced in the First Year Seminar. SYS courses engage students in a specific academic area of interest and provide them with the opportunity to reinforce, share and interpret knowledge. Students will improve their speaking, reading, research and basic information and technology skills while building the connections between scholarship and action that are required for lifelong learning. These courses will fulfill the Second Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one SYS course may be taken for credit. (CSYS)

**LIBR 299  **Second Year Seminar (Writing Intensive) (3 credits)**
Prerequisite: _ _ _ _ 199; Open to all sophomores and juniors who have completed ENGL 101 and ENGL 102. Students with 54 or more transfer credits will have this requirement waived. Cannot be taken if _ _ _ _ 299 is taken for credit.*
Second Year Seminars (SYS) are writing-intensive, topic courses that build on the academic skills and habits introduced in the First Year Seminar. SYS courses engage students in a specific academic area of interest and provide them with the opportunity to reinforce, share and interpret knowledge. Students will improve their writing, reading, research and basic information and technology skills while building the connections between scholarship and action that are required for lifelong learning. These courses will fulfill the Second Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one SYS course may be taken for credit. (CSYS)

**LIBR 420  **Literature for Young Adults (3 credits)**
Survey of literature and audiovisual materials for adolescents. Includes applicable principles of adolescent psychology, a brief history of the development of this literature, criteria and aids for selection, techniques in motivation and reading guidance and skills in reading, listening and viewing. Designed for teachers, librarians and media specialists working with junior and senior high school students. *May be taken for graduate-level credit.*

**LIBR 499  **Directed Study (1-3 credits)**
Prerequisite: Consent of department; formal application required.*
Directed study is open to juniors and seniors who have demonstrated critical and analytical abilities in their studies and who wish to pursue a project independently. This course may be repeated once for a maximum of six credits. *Offered either semester.*

**Library Media Studies: Other Approved Courses**

LIBR 410  Children’s Literature
LIBR 453  Sharing Literature with Children
LIBR 501  Administration of the Library Media Center I
LIBR 502  Research
LIBR 503  Directed Study
LIBR 505  Integrating Literature Across the Curriculum
LIBR 510  Reference and Information Resources
LIBR 513  Special Topics
LIBR 515  Cataloging and Classification
LIBR 520  Collection Development
LIBR 525  Online and Optical Information Retrieval
LIBR 530  Administration of the Library Media Center II
LIBR 540  Current Technology for Library Media Centers
LIBR 545  Technology Applications in Library Programming
LIBR 546   The Internet for School Library Media Specialists I
LIBR 548   Advanced Cataloging and Classification
LIBR 549   Multimedia for School Library Media Specialists
LIBR 553   Foundations of Library and Information Science
LIBR 558   Advanced Studies in Literature for Children and Young People
LIBR 559   Advanced Reference I
LIBR 560   Advanced Reference II
LIBR 566   Automating the School Library Media Center
LIBR 569   The Book Arts
LIBR 576   Research Problems in Library Literature
LIBR 590   Seminar on Librarianship
LIBR 594   Internship
LIBR 595   Professional Practicum
LIBR 596   Clinical Experience

- MANAGEMENT

MGMT 130   Principles of Management (3 credits)
The principles and techniques underlying the successful organization and management of business activities. This course combines the
traditional analysis of management principles with the behavioral approach to case studies. The study includes the management functions
of planning, organization, leadership, staffing control and the decision-making process. **Note: MGMT 130 is prerequisite to all other
Management courses.**

MGMT 135   Freshman Honors Colloquium (1 credit)
Prerequisite: Open to Commonwealth Honors students and to others at the discretion of instructor; MGMT 130
Freshman Honors Colloquia in management allow exceptionally able students to explore a challenging topic in small classes under close
faculty supervision. Colloquia meet once a week for 50 minutes and culminate in a paper or scientific project, which provides the major part
of the grade. The minimum enrollment is two and the maximum is 12. Topics vary from semester to semester. **Fall semester.**

MGMT 136   Freshman Honors Colloquium (1 credit)
Prerequisite: Open to Commonwealth Honors students and to others at the discretion of instructor; MGMT 130
Freshman Honors Colloquia in management allow exceptionally able students to explore a challenging topic in small classes under close
faculty supervision. Colloquia meet once a week for 50 minutes and culminate in a paper or scientific project, which provides the major part
of the grade. The minimum enrollment is two and the maximum is 12. Topics vary from semester to semester. **Spring semester.**

MGMT 140   Human Resources Management (3 credits)
Prerequisite: MGMT 130
A study of the staffing, compensation systems, individual and group behavior, employee development and human resource management
systems. **Either semester.**

MGMT 199   First Year Seminar (3 credits)
Prerequisite: Open to all freshmen with a writing placement score of 3 or above or a SAT score of 500 or above or who have completed
ENGL 101. Students with 24 or more transfer credits will have this requirement waived.
First Year Seminars (FYS) are writing-intensive, topic courses that introduce students to academic thought, discourse and practices. FYS
courses prepare and orient students toward productive and fulfilling college careers by actively engaging them in a specific academic area
of interest. Students will improve their writing, reading, research and basic information and technology skills while learning to work both
collaboratively and independently. These courses will fulfill the First Year Seminar requirement and may fulfill other requirements for the
core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one FYS course may be taken
for credit. (CFYS)

MGMT 200   Marketing Principles (3 credits)
Prerequisite: MGMT 130; and ECON 101 or ECON 102 or consent of department
Develops students' understanding of the marketing function of an organization through a survey of the history of marketing from its
inception as distribution through the modern marketing concept; in-depth study of the elements of the marketing mix (product, price, place
and promotion); impact of external legal, political, sociological and technological forces upon the marketing manager; and the structure and
placement of the marketing organization presented through lecture, case study and projects.
MGMT 201  Sports Marketing (3 credits)
This course will include two themes. The first is an examination of the various aspects of the marketing of sports nationally and internationally. The second will include the practice of using sports as a promotional tool for non-sports products. Students learn that spectators and participants are consumers of sports products. Students utilize the case study method in developing alternate solutions to problems. The course design allows for ease of entry for all students in any major regardless of marketing or management experience.

MGMT 286  Sophomore Honors Colloquium (1 credit)
Prerequisite: Open to Commonwealth Honors students and to others at the discretion of instructor; MGMT 130
Sophomore Honors Colloquia in management allow exceptionally able students to explore a challenging topic in small classes under close faculty supervision. Colloquia meet once a week for 50 minutes and culminate in a paper or scientific project, which provides the major part of the grade. The minimum enrollment is two and the maximum is twelve. Topics vary from semester to semester. Fall semester.

MGMT 287  Sophomore Honors Colloquium (1 credit)
Prerequisite: Open to Commonwealth Honors students and to others at the discretion of instructor; MGMT 130
Sophomore Honors Colloquia in management allow exceptionally able students to explore a challenging topic in small classes under close faculty supervision. Colloquia meet once a week for 50 minutes and culminate in a paper or scientific project, which provides the major part of the grade. The minimum enrollment is two and the maximum is 12. Topics vary from semester to semester. Spring semester.

MGMT 288  Introduction to Entrepreneurship (3 credits)
Prerequisite: MGMT 130 or consent of instructor
Entrepreneurism represents a field of study that helps us understand how entrepreneurs take the initiative from developing an idea and moving the idea from the idea stage to a successful business. The study of entrepreneurship also focuses on the preparation of the aspiring entrepreneur. Students learn about the personal attributes of successful entrepreneurs. To best understand entrepreneurism and the entrepreneur, students have the opportunity to put their ideas into focus by conducting the research needed to develop a business plan and prepare a presentation of this research to an audience. An entrepreneur self-assessment project and a study of entrepreneurs provide additional ways students learn about the subject. By the end of the semester, students will demonstrate the knowledge and skill-set needed to start a business.

MGMT 289  Second Year Seminar (Speaking Intensive) (3 credits)
Prerequisite: Open to all sophomores and juniors who have completed ENGL 101, and the speaking skills requirement. Students with 54 or more transfer credits will have this requirement waived. Cannot be taken if MGMT 298 is taken for credit.
Second Year Seminars (SYS) are speaking-intensive, topic courses that build on the academic skills and habits introduced in the First Year Seminar. SYS courses engage students in a specific academic area of interest and provide them with the opportunity to reinforce, share and interpret knowledge. Students will improve their speaking, reading, research and basic information and technology skills while building the connections between scholarship and action that are required for lifelong learning. These courses will fulfill the Second Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one SYS course may be taken for credit. (CSYS)

MGMT 290  Second Year Seminar (Writing Intensive) (3 credits)
Prerequisite: Open to all sophomores and juniors who have completed ENGL 101 and ENGL 102. Students with 54 or more transfer credits will have this requirement waived. Cannot be taken if MGMT 299 is taken for credit.
Second Year Seminars (SYS) are writing-intensive, topic courses that build on the academic skills and habits introduced in the First Year Seminar. SYS courses engage students in a specific academic area of interest and provide them with the opportunity to reinforce, share and interpret knowledge. Students will improve their writing, reading, research and basic information and technology skills while building the connections between scholarship and action that are required for lifelong learning. These courses will fulfill the Second Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one SYS course may be taken for credit. (CSYS)

MGMT 303  Organizational Behavior (3 credits)
Prerequisite: MGMT 130
This course introduces students to fundamental concepts and behavioral skills in such areas as leadership, communication, group dynamics, motivation and decision-making. Emphasis will be placed upon skill development enabling the student to function in professional and managerial roles in work organizations.

MGMT 304  Leadership and Teams (3 credits)
Prerequisite: MGMT 303
The course explores effective leadership behavior and teamwork skills in work organizations. Students will engage in the enhancement of their own skills in these areas combined with the study of empirical findings and classic and contemporary models of leadership and group dynamics.
MGMT 325  Marketing and Sales Promotion: Industrial and Service Sector (3 credits)
Prerequisite: MGMT 130 and MGMT 200 and COMM 130
This upper-level elective course is for students who wish to develop promotional skills in a variety of specialized areas. Actual organizational case problems will be addressed. Projects will provide experience in all aspects of promotion with exposure to campaign proposals, incentives, trade show preparation and implementation, personal selling of services, media choice and related preparation. Students will have the opportunity for hands-on experience with trade shows, professional journal advertising, community relations work and media personnel.

MGMT 340  Contemporary Employee Relations (3 credits)
Prerequisite: MGMT 130 and MGMT 140
The course examines employee relations, policies and practices from economic, behavioral and legal viewpoints. Students learn about contemporary methods of employee organization, employee-management cooperation, representation and dispute resolution in private and public non-union and union work settings in the United States and selected countries. Either semester.

MGMT 350  Business Ethics (3 credits)
Prerequisite: MGMT 130
This course addresses the complex environment of ethical decision making in organizations and real-life issues and how ethics can be integrated into strategic business decisions. The course will assist students to prepare for ethical dilemmas that they will face in their business careers.

MGMT 355  International Management (3 credits)
Prerequisite: MGMT 130
This course provides students with a framework within which a country's and a firm's international business operations are analyzed, understood and undertaken. The course focuses on the issues faced in today's international marketplace. The overall approach of the class is to treat the issue of country-level competitiveness in the first half of the semester, followed by firm-level competitiveness in the second half of the semester. The emphasis of this course is international business decision-making.

MGMT 357  International Business Study Tour (3 credits)
Prerequisite: Consent of instructor
This course offers students a first hand, supervised, business-related international travel and study experience. The business and technological environment of a selected country will be explored through visits to companies, science and technology parks, research institutes, factories and universities. Students will participate in multiple learning formats to include lectures, exchanges with international students and research activities. The course will also incorporate visits to historical and cultural sites into the course work and travel itinerary. This course may be repeated once for different itineraries. (CGCL)

MGMT 360  Fundamentals of Information Systems (3 credits)
Prerequisite: MGMT 130; and COMP 105 or COMP 151
This course is an introduction to data processing from manual systems to computers, recent developments in the field, the equipment involved, how the equipment is used, how it operates and the application of data processing systems will be covered. The course will aid students in applying the capabilities of the computer to their fields of study.

MGMT 375  Training and Development (3 credits)
Prerequisite: MGMT 130 and MGMT 140
The course introduces the student to the concepts of industrial and service training and will focus on the skills needed to perform the four roles of the training and development function: administrator, consultant, designer of learning experiences and instructor.

MGMT 380  Decision Support Systems (3 credits)
Prerequisite: MGMT 130 and MGMT 360
An analysis of the highest level of information support systems, which serve the manager user. Theoretical concepts will be applied to applications.

MGMT 399  Special Topics in Management (3 credits)
Prerequisite: MGMT 130
Special topics will be offered in business, management and allied subjects. This course may be repeated for different topics.

MGMT 410  International Marketing and Physical Distribution (3 credits)
Prerequisite: MGMT 130 and MGMT 200
An examination of the concepts and practices of marketing management in the international, multinational and global settings, including all aspects of product distribution and control. May be taken for graduate-level credit.
MGMT 415  Retail Management (3 credits)  
Prerequisite: MGMT 130 and MGMT 200  
An analysis of retail principles with emphasis on organization, consumer demand, store layout, buying merchandise, control and turnover of stock and retail sales promotion. The case method is utilized. Spring semester. May be taken for graduate-level credit.

MGMT 420  Marketing Research (3 credits)  
Prerequisite: MGMT 130 and MGMT 200; and MATH 110 or ECON 210  
An examination of the market research process used in approaching contemporary marketing problems. Emphasis is placed on the current status of research techniques and their applications. May be taken for graduate-level credit.

MGMT 424  Advertising (3 credits)  
Prerequisite: MGMT 130 and MGMT 200  
A comprehensive survey of advertising and its applications in business and society. Among the topics considered are a historical survey of advertising, regulation of advertising, buyer behavior, advertising agencies, advertising media, copy and campaign management. Fall semester. May be taken for graduate-level credit.

MGMT 426  Service Operations Management (3 credits)  
Prerequisite: MGMT 130; and ECON 210 or MATH 110  
This introductory course in operations management focuses on the service sector. It exposes students to the basic topics in operations, such as quality, service, location, efficiency and customer service and is of value to all business students.

MGMT 427  Production and Operations Management (3 credits)  
Prerequisite: MGMT 426  
This course focuses on goods production, manufacturing, inventory, sourcing and lean manufacturing.

MGMT 430  Sales Management (3 credits)  
Prerequisite: MGMT 130 and MGMT 200  
Sales programs must be formulated and then implemented. In this age of accelerating product and service complexity, this course will deal with the sales manager who must understand the importance of these major responsibilities. Fall semester. May be taken for graduate-level credit.

MGMT 435  Small Business Management (3 credits)  
Prerequisite: MGMT 130; and ACFI 100 or ACFI 240  
This course provides the student with an understanding of the unique characteristics required of the successful small business entrepreneur and the specifics relative to the start-up, financing and management of a small business. May be taken for graduate-level credit.

MGMT 440  Business to Business Marketing (3 credits)  
Prerequisite: MGMT 130 and MGMT 200  
This course provides a study of contemporary market strategy techniques in business organizations. Emphasis is placed on the case approach where students are provided an opportunity to develop strategies in response to given market opportunities and competitive behavior. May be taken for graduate-level credit.

MGMT 445  Information Systems Strategy (3 credits)  
Prerequisite: MGMT 130 and MGMT 360  
A course designed to equip students as future users of information systems. It deals with systems issues and management of the computer resource. It assumes only minimal technical background and prepares the student to make decisions on the acquisition of equipment, system analysis and related topics. Fall semester. May be taken for graduate-level credit.

MGMT 450  Current Topics in Information Systems (3 credits)  
Prerequisite: MGMT 130  
The content of this course varies. It is intended to introduce the student to significant topics that are not normally offered as separate courses. Spring semester. May be taken for graduate-level credit.

MGMT 454  E-Business Strategy, Architecture and Design (3 credits)  
Prerequisite: MGMT 360 and MGMT 445  
This course focuses on the linkage between organizational strategy and networked information technologies to implement a rich variety of business models in the national and global contexts, connecting individuals, organizations and governments to each other. The course provides an introduction to the strategy, architecture and development of e-business solutions.

MGMT 456  Information Systems Project Management (3 credits)
Prerequisite: MGMT 360 and MGMT 445
This course introduces the discipline of IS project management, stressing its importance in improving the success of information technology projects. Project management knowledge areas include integration management, scope management, time management, cost management, quality management, human resource management, communications management, risk management and procurement management. Students will work in teams to complete the design of an information system. Project management, management of the IS function and systems integration will be components of the project experience.

MGMT 460 Public Policy and Government Regulation in Global Management (3 credits)
Prerequisite: MGMT 130 and MGMT 140 and ACFI 305; or consent of department chairperson
The increasing globalization of business raises new concerns for corporate management. To operate successfully in this new environment, management needs to have a thorough understanding of the public policy, government regulations and ethical considerations that apply throughout the industrialized world. This course addresses those areas of concern. Spring semester. May be taken for graduate-level credit.

MGMT 470 Supply Chain Management (3 credits)
Prerequisite: MGMT 425 or MGMT 427
This course introduces the student to the basic principles and methods of the supply chain, outsourcing, and materials management. The course acquaints students with worldwide sourcing operations as they apply to the goods producing sector.

MGMT 471 Diversity in Organizations (3 credits)
Prerequisite: MGMT 303
The contemporary work force includes people different from one another in areas including gender, race, culture, ethnicity, physical abilities, sexual orientation, religion, and age. Viewing these multiple differences as an opportunity to acclimate to broad-based acceptance to others, this course will focus on knowledge of various aspects of work force diversity.

MGMT 475 Quality Management (3 credits)
Prerequisite: MGMT 425 or MGMT 427
This course acquaints the student with the more advanced principles and methods of quality control and Total Quality Management (TQM). It highlights the quantitative approaches to managing quality using Statistical Process Control (SPC) and lot sampling. The course stresses the application of quality management tools to both the goods producing and service sectors. Either semester. May be taken for graduate-level credit.

MGMT 480 Systems Analysis and Design (3 credits)
Prerequisite: MGMT 130 and MGMT 360 and MGMT 445
This course introduces students to systems analysis and the use of quantitative models and the computer in solving managerial problems in a variety of functional areas. Students study systems and models and the stages of a systems-analysis approach and provides an overview of systems applications at functional areas and computer techniques for systems, implementation in finance, operations and marketing. Fall semester. May be taken for graduate-level credit.

MGMT 485 Honors Thesis (3 credits)
Prerequisite: Open to Commonwealth and Departmental Honors students
One-hour weekly meetings with the thesis director will culminate in an honors thesis. With the consent of the departmental honors committee and the thesis director, this course may be extended into a second semester for three additional credits depending upon the scope of the project.

MGMT 490 Strategic Management (3 credits)
Prerequisite: Open to all management seniors in the final semester of the program
This capstone course integrates the knowledge learned in the business courses along with application to the basic concepts and models of strategic management and leadership to solve actual business problems. Case studies and/or projects are the primary pedagogical methods used to demonstrate knowledge and application of the concepts and models. May be taken for graduate-level credit. (CWRM)

MGMT 494 Marketing Management and Strategy (3 credits)
Prerequisite: Open to all management seniors in the final semester of the program; and MGMT 200 plus two of the following: MGMT 410, MGMT 415, MGMT 420, MGMT 424, MGMT 430, MGMT 440
The principles of formulating a marketing program are taught in this course. The course also demonstrates how and why marketing programs are affected by the marketing forces that bear down on the firm while remaining consistent with the needs of the target market segment. Spring semester. May be taken for graduate-level credit.
MGMT 498  Internship in Management (3-15 credits)
Prerequisite: Consent of the department chairperson; formal application required
A non-classroom experience designed for a limited number of junior and senior majors to complement their academic preparation. This course may be repeated for a maximum of 15 credits. Graded on a (P) Pass/(N) No Pass basis.

MGMT 499  Directed Study in Management (1-3 credits)
Prerequisite: Consent of the department chairperson; formal application required
Directed study is open to junior and senior majors who have demonstrated critical and analytical abilities in their studies and who wish to pursue a project independently. This course may be taken twice for a maximum of six credits.

MGMT 501  Systems Research and Problem Solving (3 credits)
Prerequisite: MATH 110 or ECON 210; and MGMT 506 or MGMT 200 and ACFI 305; and ACFI 505 or ACFI 240 and ACFI 241 and ACFI 385
This course explores both quantitative and qualitative methods for conducting systems research and solving systems problems. Systems thinking offers an approach to formulating complex managerial problems and implementing solutions, particularly problems with both technological and social elements. Students conduct projects, developing skills in proposal preparation, report writing and oral presentation of results.

MGMT 503  Directed Study (1-3 credits)
Prerequisite: ACFI 505 and MGMT 506; consent of the department and formal application required
Directed study is designed for the graduate student who desires to study selected topics in a specific field. For details, consult the paragraph titled "Directed or Independent Study" in the "College of Graduate Studies" section of this catalog. This course may be repeated for a maximum of six credits.

MGMT 504  International Business Study Tour (3 credits)
This course offers students a first-hand, supervised, business-related international travel and study experience. The business and technological environment of a selected country will be explored through visits to companies, science and technology parks, research institutes, factories and universities. Students will participate in multiple learning formats, including lectures, exchanges with international students and research activities. The course will also incorporate visits to historic and cultural sites into the travel itinerary. This course may be taken twice for credit.

MGMT 506  Marketing and Contract Management (3 credits)
Through an exploration of current issues in management, this course reinforces the concepts and vocabulary of management. Special attention is given to contracts, liability and marketing management. Students research issues in such areas as business ethics, international management, entrepreneurship, employment law, intellectual property and marketing trends. Credit can-not be applied toward a graduate degree program.

MGMT 507  Foundations of Marketing (3 credits)
This course examines the role of marketing in business strategy and planning. It covers marketing practices such as market research, environmental and competitive analysis, market segmenting and targeting, brand positioning and pricing. It also covers marketing communications including advertising, promotion, publicity and sales using both online and traditional media. Product management in new, growing, mature and declining markets, both domestically and globally is also reviewed.

MGMT 508  Foundations of Information Systems (3 credits)
This course examines the strategic, managerial and technological issues that are necessary to understand, establish, manage and use information systems in all functional areas of organizations.

MGMT 509  Foundations of Management (3 credits)
This course introduces students to critical issues involved in working within a business organization. Topics covered include general management principles, the management of human resources, the study of individuals and their behavior within organizations and elements of operations management.

MGMT 510  International Marketing (3 credits)
Prerequisite: MATH 110 or ECON 210; and MGMT 506 or MGMT 200 and ACFI 305; and ACFI 505 or ACFI 240 and ACFI 241 and ACFI 385
This course examines the concepts and practices of marketing in international and multinational settings, including all aspects of product distribution and control. The impact of the Internet and electronic business provides a special focus. Students conduct research projects.

MGMT 526  Project Management (3 credits)
This course presents a unified framework for managing multi-disciplinary and cross-functional project teams. Students learn about systems for contract and cost management, and for controlling project schedules, budgets and quality. The management of people as sources of knowledge and creativity provides a special emphasis. Students work in teams to prepare complete project plans.

MGMT 527  Product Development Processes (3 credits)
Prerequisite: MATH 110 or ECON 210; and MGMT 506 or MGMT 200 and ACFI 305; and ACFI 505 or ACFI 240 and ACFI 241 and ACFI 385
This course examines the entire life cycle of a new product or service. Students study concepts, tools and systems for supporting the concurrent management of new business prospects, including the financing, engineering, marketing, producing, distributing, staffing and other aspects of managing necessary to bring an idea to market. A project, culminating in a business plan, reinforces the importance of process and systems thinking.

MGMT 528  Quality and Risk Management (3 credits)
Prerequisite: MATH 110 or ECON 210; and MGMT 506 or MGMT 200 and ACFI 305; and ACFI 505 or ACFI 240 and ACFI 241 and ACFI 385
This course evaluates various approaches, both technical and behavioral, for managing quality and risk. Students study the tools of quality and risk management in the context of the organizational systems in which they get embedded. Case studies and in-class exercises demonstrate the advantages and disadvantages of these approaches.

MGMT 530  Global Business Issues (1.5 credits)
Prerequisite: MGMT 555 and MGMT 556 and MGMT 570 and MGMT 575
Today's increasingly interconnected and global business environment requires that managers have a solid understanding of the different geographic regions, cultures, religions and governments that exist around the world. This course will prepare students for the challenges necessary to engage in the global marketplace. Among the topics to be explored are: globalization and its driving forces, national differences in political economy and legal systems, differences in culture and business ethics, regional economic integration such as the EU and NAFTA, the organization of international business, modes of foreign entry and strategic alliances, international business operations, including exporting, importing, overseas manufacturing and global human resource management.

MGMT 536  Global Management (3 credits)
This course focuses on cultural diversity and the importance of history, demographics, geography, resource location, human values and expectations to the businesses in the global economy. The influence of religion, social norms, political and economic systems on shaping business relationships between multinational organizations and host countries is examined in depth through case studies, research projects, group discussions and presentations.

MGMT 540  Industrial Marketing (3 credits)
Prerequisite: MATH 110 or ECON 210; and MGMT 506 or MGMT 200 and ACFI 305; and ACFI 505 or ACFI 240 and ACFI 241 and ACFI 385
Students study contemporary market strategy techniques in business organizations. Case studies provide students with an opportunity to develop strategy in response to given market opportunities and competitive behavior.

MGMT 545  Consumer and Buyer Behavior (3 credits)
Prerequisite: MATH 144; and ECON 210 or MATH 110; or consent of instructor
This course uses concepts from the behavioral sciences for identifying market segments, predicting customer response to alternative marketing strategies, developing marketing strategies for specific consumer markets, and modeling consumer decision making. Theories and applied research from marketing and the social sciences are considered to enable marketers to better understand customers and meet their needs. Key course concepts include decision process of buyers, factors affecting purchasing decisions and customer satisfaction. Implications for marketing strategies (e.g., market segmentation, product design and promotion) are examined.

MGMT 550  Communications for Managers (1.5 credits)
Prerequisite: MGMT 509
This course applies technical skills and necessary theoretical knowledge of communication arts to specific business situations. Topics include contemporary managerial writing, technologically mediated communications, interpersonal and group communication strategies.

MGMT 554  Issues in Global E-Commerce (3 credits)
Prerequisite: MATH 110 or ECON 210; and MGMT 506 or MGMT 200 and ACFI 305; and ACFI 505 or ACFI 240 and ACFI 241 and ACFI 385
This course explores how the Internet affects product and service costs, customer response times, and quality across a variety of
industries. Students research modern e-business models in relation to both business strategy and the broader societal impacts of these new organizational forms.

MGMT 555  Marketing Management (1.5 credits)
Prerequisite: MGMT 507
Students will learn about the universal applications of marketing concepts to consumer, business and government markets, profit and nonprofit organizations, domestic, foreign and international companies, and both large and small firms. Topics include analysis of market opportunities, segmentation and planning, product mix and development strategies, pricing, distribution and sales. This course has a managerial orientation and uses an analytical approach.

MGMT 556  Operations Management (1.5 credits)
Prerequisite: MGMT 509 and ECON 501
After an overview of the role of operations in the economy, some advanced approaches for achieving operational competitiveness in businesses are illustrated through case studies. The following topics will be explored: operations concepts and its interaction with other functions, process design and analysis, capacity management, quality management, revenue management and supply chain management.

MGMT 561  Environmental Management (3 credits)
Prerequisite: MATH 110 or ECON 210; and MGMT 506 or MGMT 200 and ACFI 305; and ACFI 505 or ACFI 240 and ACFI 241 and ACFI 385
This course covers environmental laws and regulations as they apply to industrial organizations. Students explore the relationships between technology, community development, and the long-term sustainability of natural resources. Special topics include ISO 14000 standards, the role of private industry in developing new technology, and the responsibilities of both business and government in a global economy.

MGMT 562  Strategic Management of Technological Innovation (Capstone) (3 credits)
Prerequisite: MATH 110 or ECON 210; and MGMT 506 or MGMT 200 and ACFI 305; and ACFI 505 or ACFI 240 and ACFI 241 and ACFI 385
This capstone course employs extensive case analyses to explore alternative strategies for the management of new technology. Students develop a systems and process perspective through research on emerging approaches to strategic management, including business process re-engineering, organizational learning, sustainability, concurrent engineering, supply chain management and self-directed teams, among others.

MGMT 570  Organizational Behavior (1.5 credits)
Prerequisite: MGMT 509
The focus of this course is to study individual behavior within an organizational setting. The course enables students to better understand the issues that affect individual and group dynamics within an organization so students learn how to solve “people” issues within the organization. Topics covered include: group dynamics, team-building, employee training and development, organizational culture, organizational structure and leadership.

MGMT 571  Organizational Culture and Work Force Diversity (3 credits)
Prerequisite: MATH 110 or ECON 210; and MGMT 506 or MGMT 200 and ACFI 305; and ACFI 505 or ACFI 240 and ACFI 241 and ACFI 385
This course uses knowledge about different cultures, across organizational types, industries, and nations, to develop an understanding of how diverse members of an organization can work together toward shared values, while still maintaining their individual identities. Students study a variety of culture-dependent approaches to time, space, language and workplace practices. The management of work force diversity as a valuable resource for organizational creativity and knowledge-building provides a special emphasis.

MGMT 572  Interpersonal and Group Behavior (3 credits)
Prerequisite: MATH 110 or ECON 210; and MGMT 506 or MGMT 200 and ACFI 305; and ACFI 505 or ACFI 240 and ACFI 241 and ACFI 385
This course prepares students to participate as effective group members and to act as successful group leaders in workplace project teams. Students study the set of skills that professionals and managers need to meet the challenges posed by trends toward organizational decentralization, functional integration, use of cross-functional project teams and work force diversity. Theories of interpersonal and group behavior offer students the opportunity to assess individual skills and to experiment with new skills.

MGMT 575  Managing Human Capital (1.5 credits)
Prerequisite: MGMT 509
The 21st century focus of this course is to provide the firm with competitive advantages associated with the organization’s human resources. The course is designed to provide students with the practical skills to effectively manage people. Skill areas include the design,
implementation and improvement in recruiting systems, performance evaluation systems, people development practices, reward systems to motivate employees, talent management and retention.

**MGMT 576 Organizational Change and Leadership (3 credits)**
*Prerequisite: MATH 110 or ECON 210; and MGMT 506 or MGMT 200 and ACFI 305; and ACFI 505 or ACFI 240 and ACFI 241 and ACFI 385*
This course examines the impact of leadership on the organizational change process within a variety of work settings. New leadership styles and practices emerging in the context of cross-functional structures, joint ventures and project-based organizations provide a special emphasis. Through both in-class exercises and group projects, students learn about approaches to change management and develop awareness of their leadership attributes.

**MGMT 577 Power and Influence in Organizations (3 credits)**
*Prerequisite: MATH 110 or ECON 210; and MGMT 506 or MGMT 200 and ACFI 305; and ACFI 505 or ACFI 240 and ACFI 241 and ACFI 385*
This course explores the nature, practice, and effects of power and influence in work organizations. Students study classical and contemporary ideas on leadership to understand how the concepts and practices of power and influence are changing. Cases and simulations demonstrate methods for the effective and ethical exercise of power and influence in organizational units, on project teams and within the organizational culture as a whole.

**MGMT 578 Organizational Development (3 credits)**
*Prerequisite: MATH 110 or ECON 210; and MGMT 506 or MGMT 200 and ACFI 305; and ACFI 505 or ACFI 240 and ACFI 241 and ACFI 385*
This course explores current topics in organizational development and change, including the practical and ethical issues arising in the context of multinational organizations and the conduct or international business. Guest speakers augment student presentations and seminar discussions.

**MGMT 580 Business Research Methods (1.5 credits)**
*Prerequisite: MGMT 555 and MGMT 556 and MGMT 570 and MGMT 575*
Business research involves systematic inquiry whose objective is to provide information useful in solving managerial problems. This course builds on students' knowledge of organizational needs and practices by focusing on how to do business research with an emphasis on applied problem solving. It has a major focus on problem identification and analysis, problem solving strategies and communication skills.

**MGMT 581 Information Resources Management (3 credits)**
*Prerequisite: MATH 110 or ECON 210; and MGMT 506 or MGMT 200 and ACFI 305; and ACFI 505 or ACFI 240 and ACFI 241 and ACFI 385*
Students study the technology, systems, and processes that allow organizations to manage information and knowledge as valuable resources. Topics include the conceptualization of data, including data structures, data modeling, data administration and the selection of a database environment. The role of information systems in both the routine conduct of business and long-term strategic planning provide a special emphasis.

**MGMT 582 Business System Design and Integration (3 credits)**
*Prerequisite: MATH 110 or ECON 210; and MGMT 506 or MGMT 200 and ACFI 305; and ACFI 505 or ACFI 240 and ACFI 241 and ACFI 385*
This course introduces fundamental concepts of data communications, networking, and decision support systems. Included are topics such as processing quantitative and qualitative information, systems analysis and design, technical aspects of data transmission, network architecture and implications for management.

**MGMT 590 Management Systems Seminar (3 credits)**
*Prerequisite: Taken in the final semester of the MS program; MGMT 501 and MGMT 526 and MGMT 576 and MGMT 581 and MGMT 582 and 9 additional credit hours of MS course requirements*
Students will demonstrate and utilize their knowledge through a practical, in-depth analysis of a management system. Working with a client organization, students will assure that their analyses integrate strategic systems, information systems and management systems to facilitate organizational change.

**MGMT 594 Marketing Management and Strategy (3 credits)**
*Prerequisite: MATH 110 or ECON 210; and MGMT 506 or MGMT 200 and ACFI 305; and ACFI 505 or ACFI 240 and ACFI 241 and ACFI 385*
This course integrates the formulation of a marketing program with an organization's overall business strategy. Students learn how and
why social, economic and political forces affect the selection and success of a marketing program, and ways in which a business firm can continue to meet the needs of its market segments in the context of these forces.

**MGMT 595  Strategic Management (3 credits)**
This capstone course emphasizes managerial decision-making that involves all aspects of an organization. It tests the capability of the student to apply all prior learning to solve actual strategic management problems. The final project of the course is project-based and serves as an outcomes assessment of what the student has learned in the program.

**MGMT 598  Leadership, Ethics and Corporate Accountability (3 credits)**
*Prerequisite: MGMT 555 and MGMT 556 and MGMT 570 and MGMT 575*
Students evaluate business decision problems from the perspective of ethical principles and corporate social responsibility, utilize different approaches to applying corporate social responsibility in the evaluation of business decision problems, and learn to communicate the values associated with social responsibility from a leadership position.

**MGMT 599  Topical Seminar in Management (3 credits)**
*Prerequisite: Consent of instructor*
Faculty members offer topics of special interest that stem from their own work and that are relevant to students work and interests. Topics will vary each time the course is offered. This course may be repeated twice for different topics.

**Management: Other Approved Courses**

**MGMT 512  Presentation Strategies (1 credit)**
Students learn how to plan and deliver an effective presentation by using a presentation model that follows a systematic approach, including assessing the needs of the audience and developing an effective agenda, materials and technology tools. *Fall semester.*

**MGMT 513  Interpersonal Communication (1 credit)**
Person-to-person communication will focus on active listening and supportive communication, negotiation and effective meetings. *Fall semester.*

**MGMT 514  Human Resources Laws and Regulations (1 credit)**
Beginning with Equal Employment Opportunity laws, the course will ensure students are familiar with human resource fundamentals, including the Americans with Disabilities Act. *Fall semester.*

**MGMT 515  Managing Diversity (1 credit)**
Students will work with cases that will foster understanding of modifications of American-style management that may be needed in organizations of diverse people. *Fall semester.*

**MGMT 516  Business Writing (1 credit)**
Students will learn the commonly accepted principles of business writing, including developing the document as a whole, determining the best format to use in certain situations, and capitalizing on word choice and document flow. *Fall semester.*

**MGMT 517  Decision Making (1 credit)**
This workshop will emphasize common biases and mistakes, fairness and ethics in decision making, and the improvement of decision making. *Fall semester.*

**MGMT 518  Career Development (1 credit)**
Beginning with career planning, the workshop will include networking, job searching, resume writing, interviewing and transitional strategies for career advancement. Students will map an appropriate career path for themselves. *Fall semester.*

**MGMT 519  Teamwork in the Contemporary Organization (1 credit)**
This course will engage students in small group decision making, with a focus on necessary roles including leadership, communication, integrity, team building and goal setting. *Fall semester.*

**MGMT 546  Business Ethics (3 credits)**
This course will introduce students to the field of corporate responsibility through a series of lectures and projects. In their readings, fieldwork and interactive classroom sessions, students will examine best practices used by companies to engage in socially responsible business and will analyze what ethical principles should govern business behavior, including value clarification. Students will use a decision-making matrix for applying ethical principles to business and consider the kinds of designs necessary to foster corporate social responsibility.
■ MATHMATICS

MATC 560  Topics in Mathematics for Teachers (1-3 credits)
Prerequisite: May be specified depending on the nature of the topic
Special topics of relevance to mathematics teachers will be offered from time to time. The topics to be offered will be content focused and directly related to the strands of the Massachusetts Curriculum Framework, as they pertain to mathematics teachers. This course is not part of the MAT in Mathematics. This course may be repeated for different topics.

MATH 100  Precalculus Mathematics (3 credits)
Prerequisite: Mathematics placement test
This course provides a review of algebraic fundamentals (exponents, logarithms, linear and quadratic equations) and a study of functions of various types (polynomial, rational, transcendental). Either semester. (CMAR)

MATH 105  Selected Topics in Mathematics (3 credits)
Prerequisite: Mathematics placement test
The nature and process of mathematical thinking (inductive, deductive, and algorithmic), as well as applications and results, are the underlying components of this course. Possible topics to be explored include sets, logic, number theory, geometry, graph theory and probability. A selection of three or more such topics will be offered each semester. Either semester. (CMAR)

MATH 110  Elementary Statistics I (3 credits)
Prerequisite: Mathematics placement test
Measure of central tendency and variability; elementary probability; binomial, normal and t distributions; hypothesis testing and confidence intervals. Either semester. (CMAR)

MATH 112  Mathematics for Elementary Teachers I (3 credits)
Prerequisite: FRSK 102 or mathematics placement test. Restricted to majors in Early Childhood, Elementary and Special Education
This course develops student's understanding of the mathematical concepts of number and operations, and the properties of number systems at the deep level required for successful elementary school teaching in ways that are meaningful to pre-service elementary teachers. Topics will include place value and arithmetic models, mental math, algorithms, prealgebra factors and prime numbers, fractions and decimals, ratio, percentage and rate, integers and elementary number theory. Offered either semester. (CMAR)

MATH 113  Mathematics for Elementary Teachers II (3 credits)
Prerequisite: MATH 107 or MATH 112
Restricted to majors in Early Childhood, Elementary and Special Education. This course develops student's understanding of the mathematical content of geometry, measurement, probability and statistics at the deep level required for successful elementary school teaching in ways that are meaningful to pre-service elementary teachers. Topics will include two- and three-dimensional geometry, measurement, data analysis, single variable statistics and probability. Offered either semester. (CMAR)

MATH 114  Mathematics for Elementary Teachers III (3 credits)
Prerequisite: MATH 107 or MATH 112
Restricted to majors in Early Childhood, Elementary and Special Education. This course develops student's understanding of the mathematical content of patterns, functions and algebra at the deep level required for successful elementary school teaching in ways that are meaningful to pre-service elementary teachers. Topics will include concepts of variable and function; linear, quadratic and exponential functions and their graphs; patterns, arithmetic and geometric progressions; solving equations and applications. Connections between arithmetic and algebra will be emphasized. Offered either semester. (CMAR)

MATH 120  Introduction to Linear Algebra (3 credits)
Prerequisite: Mathematics placement test
Topics include algebra and geometry of vectors in Rn, linear equations, matrices, determinants, basis and dimension, and the use of homogenous coordinates for the matrix representation of linear and geometric transformations and their compositions. Fall semester. (CMAR)

MATH 130  Discrete Mathematics I (3 credits)
Prerequisite: Mathematics placement test
This course provides some of the mathematical background necessary for computer science. Topics include combinations and discrete probability, discrete functions and graph theory. Spring semester. (CMAR)
MATH 135  Freshman Honors Colloquium (1 credit)
Prerequisite: Open to Commonwealth Honors students and to others at the discretion of instructor
Freshman Honors Colloquia in mathematics allow exceptionally able students to explore a challenging topic in small classes under close faculty supervision. Colloquia meet once a week for 50 minutes and culminate in a paper or scientific project, which provides the major part of the grade. The minimum enrollment is two and the maximum is 12. Topics vary from semester to semester. Fall semester.

MATH 136  Freshman Honors Colloquium (1 credit)
Prerequisite: Open to Commonwealth Honors students and to others at the discretion of instructor
Freshman Honors Colloquia in mathematics allow exceptionally able students to explore a challenging topic in small classes under close faculty supervision. Colloquia meet once a week for 50 minutes and culminate in a paper or scientific project, which provides the major part of the grade. The minimum enrollment is two and the maximum is 12. Topics vary from semester to semester. Spring semester.

MATH 141  Elements of Calculus I (3 credits)
Prerequisite: MATH 100 or a mathematics placement test
This course introduces the student to the main concepts, methods, and techniques of differential calculus. Emphasis is on how these arise from problems in several areas, rather than from a rigorous development of the theory. A principal objective of this course is to illustrate how mathematics is used to model physical reality and how such a mathematical model facilitates the solution of problems. This course does not satisfy mathematics major requirement. Credit cannot be given for both MATH 141 and MATH 144. Either semester. (CMAR)

MATH 142  Elements of Calculus II (3 credits)
Prerequisite: MATH 141
The topics include the integral and its applications as well as multivariable calculus. Additional topics are selected from: differential equations, Taylor series and probability distributions. This course does not satisfy mathematics major requirements. Either semester. (CMAR)

MATH 143  Problem Solving in Mathematics (1 credit)
Prerequisite: This course can only be taken as a co-requisite course with enhanced sections (also sometimes referred to as targeted sections) of mathematics. Consent of Academic Achievement Center or Department Chairperson required.
This course is a required co-requisite for enhanced sections of FRSK 102, MATH 100, MATH 110 and other 100-level targeted MATH courses. Under faculty supervision, students acquire strategies of problem solving and study skills related to their main mathematics course. This course may be repeated twice for credit. This course will be graded on a (P) Pass/(N) No Pass basis. Students in this course will attend at least one hour with a mathematics coach and two additional hours on problem solving. Addenda: This course has been changed effective spring 2012. See the Catalog Addenda section of this publication for detailed information.

MATH 144  Applied Calculus for Business (3 credits)
Prerequisite: MATH 100 or a mathematics placement test
This is a one-semester course in applied differential and integral calculus with emphasis on business applications. Topics to be covered include derivatives of algebraic, logarithmic and exponential functions, optimization problems, antiderivatives and the fundamental theorem of calculus, techniques of integration, functions of several variables and partial derivatives. This course does not satisfy mathematics major requirements. (CMAR)

MATH 151  Calculus I (3 credits)
Prerequisite: MATH 100 or a mathematics placement test
This course introduces the student to a rigorous development of the differential calculus. Emphasis is on the development of the concepts of calculus as typical of a cohesive mathematical theory. Fall semester. (CMAR)

MATH 152  Calculus II (3 credits)
Prerequisite: MATH 151
This course is an intensive study of the integral and its applications, transcendental functions, conic sections and additional techniques of integration. Spring semester. (CMAR)

MATH 180  Transition to Advanced Mathematics (3 credits)
Prerequisite: MATH 151, which may be taken concurrently.
This course is an introduction to formal mathematics and provides a transition from computation-based mathematics to the more theoretical approach used in advanced mathematics courses. Topics covered include mathematical logic, set theory, concepts of relation, function and cardinality, and the design and structure of axioms and axiomatic systems are discussed. A large emphasis is placed on reading, analyzing and learning to produce proofs of mathematical statements. (CLOR) Addenda: This course has been changed effective spring 2012. See the Catalog Addenda section of this publication for detailed information.
MATH 199  First Year Seminar (3 credits)
Prerequisite: Open to all freshmen with a writing placement score of 3 or above or a SAT score of 500 or above. Students with 24 or more transfer credits will have this requirement waived.
First Year Seminars (FYS) are writing-intensive, topic courses that introduce students to academic thought, discourse and practices. FYS courses prepare and orient students toward productive and fulfilling college careers by actively engaging them in a specific academic area of interest. Students will improve their writing, reading, research and basic information and technology skills while learning to work both collaboratively and independently. These courses will fulfill the First Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one FYS course may be taken for credit. (CFYS)

MATH 200  Probability and Statistics (3 credits)
Prerequisite: MATH 142 or MATH 152
Permutations and combinations; types of events, conditional probability, elementary probability distributions, elementary cumulative distributions, mathematical expectation, measures of central tendency, variance and standard deviation, and normal distributions. Additional statistics topics as time allows. Addenda: This course has been changed effective spring 2012. See the Catalog Addenda section of this publication for detailed information.

MATH 202  Linear Algebra (4 credits)
Prerequisite: MATH 142 or MATH 152
Vector spaces, linear transformations, matrices, systems of linear equations and determinants. Spring semester. Addenda: This course has been changed effective spring 2012. See the Catalog Addenda section of this publication for detailed information.

MATH 214  Introduction to Modern Algebra (3 credits)
Prerequisite: MATH 105 or MATH 100 or MATH 107 or consent of the department
Linear congruencies, groups, matrices and linear systems. Offered alternate years, fall semester.

MATH 251  Calculus III (3 credits)
Prerequisite: MATH 152
This course covers infinite sequences and series and multivariable calculus including partial differentiation, directional derivatives, max/min theory and multiple integration. Fall semester.

MATH 252  Calculus IV (3 credits)
Prerequisite: MATH 251
This course covers, with an emphasis on techniques, the topics of vector differentiation and integration, line integrals and Green’s theorem. This course also includes a rigorous re-examination of the calculus topics of limits, continuity, differentiability and integrability.

MATH 286  Sophomore Honors Colloquium (1 credit)
Prerequisite: Open to Commonwealth Honors students and to others at the discretion of instructor
Sophomore Honors Colloquia in mathematics allow exceptionally able students to explore a challenging topic in small classes under close faculty supervision. Colloquia meet once a week for 50 minutes and culminate in a paper or scientific project, which provides the major part of the grade. The minimum enrollment is two and the maximum is 12. Topics vary from semester to semester. Fall semester.

MATH 287  Sophomore Honors Colloquium (1 credit)
Prerequisite: Open to Commonwealth Honors students and to others at the discretion of instructor
Sophomore Honors Colloquia in mathematics allow exceptionally able students to explore a challenging topic in small classes under close faculty supervision. Colloquia meet once a week for 50 minutes and culminate in a paper or scientific project, which provides the major part of the grade. The minimum enrollment is two and the maximum is 12. Topics vary from semester to semester. Spring semester.

MATH 298  Second Year Seminar (Speaking Intensive) (3 credits)
Prerequisite: _ _ _ _ 199; Open to all sophomores and juniors who have completed ENGL 101, and the speaking skills requirement. Students with 54 or more transfer credits will have this requirement waived. Cannot be taken if _ _ _ _ 299 is taken for credit.
Second Year Seminars (SYS) are speaking-intensive, topic courses that build on the academic skills and habits introduced in the First Year Seminar. SYS courses engage students in a specific academic area of interest and provide them with the opportunity to reinforce, share and interpret knowledge. Students will improve their speaking, reading, research and basic information and technology skills while building the connections between scholarship and action that are required for lifelong learning. These courses will fulfill the Second Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one SYS course may be taken for credit. (CSYS)

MATH 299  Second Year Seminar (Writing Intensive) (3 credits)
Prerequisite: _ _ _ _ 199; Open to all sophomores and juniors who have completed ENGL 101 and ENGL 102. Students with 54 or more transfer credits will have this requirement waived. Cannot be taken if _ _ _ _ 298 is taken for credit.

Second Year Seminars (SYS) are writing-intensive, topic courses that build on the academic skills and habits introduced in the First Year Seminar. SYS courses engage students in a specific academic area of interest and provide them with the opportunity to reinforce, share and interpret knowledge. Students will improve their writing, reading, research and basic information and technology skills while building the connections between scholarship and action that are required for lifelong learning. These courses will fulfill the Second Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one SYS course may be taken for credit. (CSYS)

MATH 301 Abstract Algebra I (3 credits)
Prerequisite: MATH 202
Study of relations, functions, and binary operations. Introduction to the theory of rings, integral domains and fields through a study of integers, rational numbers, real numbers, complex numbers and polynomials, and elementary group theory. Fall semester.

MATH 302 Abstract Algebra II (3 credits)
Prerequisite: MATH 301
Group theory, linear groups, rings and ideals, extensions of rings and fields.

MATH 303 Number Theory (3 credits)
Prerequisite: MATH 202 or consent of the department
Development of the number system, the Euclidean Algorithm and its consequences, theory of congruencies, number-theoretic functions, Diophantine equations and quadratic residues.

MATH 316 Differential Equations (3 credits)
Prerequisite: MATH 251
Ordinary differential equations of first and second order, linear differential equations with constant coefficients, the Laplace transformation and applications. Addenda: This course has been changed effective spring 2012. See the Catalog Addenda section of this publication for detailed information.

MATH 318 Quantitative Methods for Management (3 credits)
Prerequisite: MATH 142 or MATH 144 or MATH 152; and MATH 110 or ECON 210 or equivalent
Selected mathematical tools and techniques for analysis of business and economic problems as an aid to decision-making in management. Models and applications related to decision theory, linear programming, inventory, queuing, forecasting and other standard qualitative concepts. Either semester. Addenda: This course has been changed effective spring 2012. See the Catalog Addenda section of this publication for detailed information.

MATH 325 Foundations of Geometry (3 credits)
Prerequisite: MATH 202
In this course, students will broaden their understanding of Euclidean geometry; study finite geometries, geometric transformations and non-Euclidean geometries; write geometric proofs; construction problems; and apply geometric concepts to real-world situations. Either semester.

MATH 326 Projective Geometry (3 credits)
Prerequisite: MATH 120 or consent of the department
A synthetic and analytic study of the axioms and properties of the projective plane; the projective group of transformations, its subgeometries and their invariant properties.

MATH 330 Discrete Mathematics II (3 credits)
Prerequisite: MATH 130 and COMP 152
Course topics will include formal logic, automata and formal languages, and an introduction to the analysis of algorithms. Either semester.

MATH 338 Honors Tutorial (3 credits)
Prerequisite: Consent of the department
Special topics in mathematics. Open to Commonwealth and Departmental Honors students. Three hourly meetings weekly. Fall semester.

MATH 339 Honors Tutorial (3 credits)
Prerequisite: Consent of the department
Special topics in mathematics. Open to Commonwealth and Departmental Honors students. Three hourly meetings weekly. Spring semester.

MATH 340 Graph Theory (3 credits)
**MATH 341 Cryptology (3 credits)**  
Prerequisite: MATH 202  
Cryptology is the study of the composition, design, use and analysis of methods and systems to encrypt and decrypt messages. This course begins with a review of classical cryptosystems from shift ciphers to the enigma machine. Modern private-key encryption schemes such as AES (the Advanced Encryption Standard) and public-key encryption schemes such as RSA will also be studied. In addition, digital signatures, secret sharing and zero-knowledge proofs will be examined. Other techniques and methods of cryptology such as steganography, discrete logarithms, elliptic curves and quantum computing may be explored. **Offered once per year.**

**MATH 345 Combinatorics (3 credits)**  
Prerequisite: MATH 202 or consent of instructor  
Methods examined in this course are permutations, combinations, the sum and product rules, ordered and unordered selection with or without repetition, identical and distinct ranges, the pigeonhole principle, binomial coefficients, inclusion/exclusion, derangements, partitions, recurrence relations, generating functions and Ramsey theory. Special topics may include Latin squares, graph theory, network flows, coding theory, designs, Pólya counting, partially ordered sets and lattices.

**MATH 349 Foundations of Mathematics (3 credits)**  
Prerequisite: MATH 202  
The course axiomatically develops the number systems as algebraic structures starting with the construction of the natural numbers using the Peano postulates and continuing to the ordered integral domain of integers, the ordered field of rationals, and the complete ordered field of real numbers by using Cauchy sequences.

**MATH 399 Topics in Advanced Mathematics (3 credits)**  
Special topics selected from the general areas of algebra, analysis and applied mathematics. This course may be repeated for different topics.

**MATH 401 Introduction to Analysis I (3 credits)**  
Prerequisite: MATH 202 and MATH 252  
Logic and proof techniques are followed by basic theorems on the topology of real numbers, compactness, limits, sequences, continuity and differentiability. **Spring semester. May be taken for graduate-level credit.** Addenda: This course has been changed effective spring 2012. See the Catalog Addenda section of this publication for detailed information.

**MATH 403 Probability Theory (3 credits)**  
Prerequisite: MATH 251  
All elementary probability topics: permutations and combinations, types of events, conditional probability, Bayes’ Theorem and so on. A calculus approach to probability distribution and cumulative distributions, moment and moment generating functions. **May be taken for graduate-level credit.** Addenda: This course has been changed effective spring 2012. See the Catalog Addenda section of this publication for detailed information.

**MATH 408 History of Mathematics (3 credits)**  
Prerequisite: MATH 202 and MATH 252  
A historical development of mathematics from ancient time to the Middle Ages (c. 3500 B.C. to c. 1400 A.D.). Some of the topics covered include Egyptian, Babylonian and Mayan Numeration Systems; Greek mathematics, including the Pythagorean, Platonic and Alexandrian schools; Asian contributions and the Arabic Hegemony; and principal mathematicians of the European Middle Ages, including Alcuin, Fibonacci and Oresme. **May be taken for graduate-level credit.** (CWRM) Addenda: This course has been changed effective spring 2012. See the Catalog Addenda section of this publication for detailed information.

**MATH 415 Numerical Analysis (3 credits)**  
Prerequisite: MATH 251  
Solution of algebraic and transcendental equations, general iteration method, Newton-Raphson method. Approximation of functions and curve fitting, Lagrange interpolation formula, Newton’s forward difference method, method of least squares, orthogonality, numerical integration and Euler-Cauchy technique. **May be taken for graduate-level credit.** Addenda: This course has been changed effective spring 2012. See the Catalog Addenda section of this publication for detailed information.
MATH 416  Applied Mathematics (3 credits)
Prerequisite: MATH 251
Fourier analysis, solutions of partial differential equations, special functions, and line and surface integrals. May be taken for graduate-level credit. (CWRM) Addenda: This course has been changed effective spring 2012. See the Catalog Addenda section of this publication for detailed information.

MATH 445  Logic Programming (3 credits)
Prerequisite: Junior or senior mathematics major or equivalent background; and consent of the department
The propositional and first order predicate logic from an axiomatic point of view will be studied. Algorithmic methods of theorem proving will be emphasized.

MATH 460  Introduction to Robotics (3 credits)
Cross Listed with COMP 460
Prerequisite: COMP 330
An introduction to the theory of the motion of robot manipulators, along with the mathematics, programming and control of manipulators will be emphasized. Also examined will be issues of sensing and planning. May be taken for graduate-level credit.

MATH 485  Honors Thesis (3 credits)
Prerequisite: Open to Commonwealth and Departmental Honors students
In this course, one-hour weekly meetings with the thesis director will culminate in an honors thesis. With the consent of the Departmental Honors Committee and the thesis director, this course may be extended into a second semester for three additional credits depending upon the scope of the project. Whether the final version of the thesis qualifies the student to graduate with honors will be determined by the Departmental Honors Committee. Offered either semester.

MATH 490  Mathematics Seminar (3 credits)
Prerequisite: MATH 251 and MATH 202 and MATH 301; or consent of the department
Topics to be selected from algebra, geometry and analysis. May be offered as a quarter or semester course. May be taken for graduate-level credit. Addenda: This course has been changed effective spring 2012. See the Catalog Addenda section of this publication for detailed information.

MATH 499  Directed Study in Mathematics (1-3 credits)
Prerequisite: Consent of the department; formal application required
Directed study is open to juniors and seniors who have demonstrated critical and analytical abilities in their studies and who wish to pursue a project independently. This course may be taken twice for a maximum of six credits. Offered either semester.

MATH 502  Research (3 or 6 credits)
Prerequisite: Consent of the department; formal application required
Original research undertaken by the graduate student in their field. For details, consult the paragraph titled “Directed or Independent Study” in the “College of Graduate Studies” section of this catalog. This course may be repeated for a maximum of six credits.

MATH 503  Directed Study (1-3 credits)
Prerequisite: Consent of the department; formal application required
Directed study is designed for the graduate student who desires to study selected topics in a specific field. For details, consult the paragraph titled “Directed or Independent Study” in the “College of Graduate Studies” section of this catalog. This course may be repeated for a maximum of six credits.

MATH 507  Topology (3 credits)
Prerequisite: MATH 251 and MATH 301 or equivalent; and admission to the MAT in Mathematics program; or consent of instructor
Elements of point set topology, closed sets and open sets in metric spaces, continuous mappings, connection, separation theorems, and compactness.

MATH 508  History of Mathematics (3 credits)
Prerequisite: Admission to the MAT in Mathematics program or consent of instructor
A historical development of mathematics from ancient time to the Middle Ages (c. 3500 B.C. to c. 1400 A.D.). Some of the topics covered include Egyptian, Babylonian and Mayan Numeration Systems; Greek mathematics, including the Pythagorean, Platonic and Alexandrian schools; Asian contributions and the Arabic Hegemony; and principal mathematicians of the European Middle Ages, including Alcuin, Fibonacci and Oresme. Students will be required to complete two projects that will culminate in formal presentations.

MATH 510  Group Theory (3 credits)
Prerequisite: MATH 301 or equivalent; and admission to the MAT in Mathematics program
Groups, subgroups, homomorphisms, normal subgroups and quotient groups, generators, normal structure and the Jordan-Holden Theorem, direct products of groups.

MATH 511 Ring Theory (3 credits)
Prerequisite: MATH 301 or equivalent; and admission to the MAT in Mathematics program; or consent of instructor
Examples of rings, ideals and homomorphisms, the Jacobson radical, direct sums, Boolean rings and rings with chain conditions.

MATH 518 Topics in Analysis (3 credits)
Prerequisite: MATH 202 and MATH 252; and admission to the MAT in Mathematics program; or consent of instructor
The course consists of a detailed discussion of limits, continuity, and applications of differential and integral calculus, and the real number system. Group and/or individual projects will be required as part of the course. This course is designed to provide graduate-level mathematics education students with an introduction to analysis, appropriate to the needs of secondary school mathematics teachers.

MATH 522 Complex Analysis (3 credits)
Prerequisite: MATH 401 and admission to the MAT in Mathematics program; or consent of instructor
Analytic functions of a complex variable, differentiation and integration in the complex plane. Cauchy's theorems, infinite series, Laurent expansions and theory of residues.

MATH 525 Mathematics in Science (3 credits)
Prerequisite: High school/middle school teacher of mathematics or science; and admission to the MAT in Mathematics program; or consent of instructor
This course contains the mathematical background necessary for a variety of science applications. Topics include linear algebra, statistics, discrete mathematics, geometry, calculus and numerical analysis as well as computer software to enhance their application to problem solving in science.

MATH 551 Topics in Finite Mathematics (3 credits)
Prerequisite: Admission to the MAT in Mathematics program or consent of instructor
This course is designed for teachers of mathematics, and will extend and enrich the topics of finite mathematics. Possible topics include sets, logic, probability, statistics, combinatorics and graph theory.

MATH 552 Topics in Analytic Geometry (3 credits)
Prerequisite: Admission to the MAT in Mathematics program or consent of instructor
Properties, definitions and applications of conic sections will be studied. Vectors, polar coordinates and calculus will be used to enhance the presentation and to develop formulas for tangent lines, areas and volumes. Translation and rotation of axis and invariants under translation will be covered. Quadric surfaces and their graphs, along with homogeneous coordinates, will be discussed.

MATH 561 Topics in Number Theory (3 credits)
Prerequisite: Admission to the MAT in Mathematics program or consent of instructor
Topics will include an in-depth study of primes, divisibility, congruence, number theoretic functions, numeration systems and other related topics selected by the instructor.

MATH 562 Topics in Geometry (3 credits)
Prerequisite: Admission to the MAT in Mathematics program or consent of instructor
This course employs classical and modern tools to explore topics that extend and enrich the standard high school geometry curriculum. Possible topics include transformations, tessellations, non-Euclidean geometrics and fractals.

MATH 582 Topics in Problem Solving Using Technology (3 credits)
Prerequisite: Admission to the MAT in Mathematics program or consent of instructor
This course will include an in-depth study of problem-solving techniques in mathematics using technology. Application problems will include topics from physical and social sciences.

MATH 596 Topics in Mathematics (3 credits)
Prerequisite: Admission to the MAT in Mathematics or consent of instructor
Topics are chosen from various areas of study in mathematics, such as theory of holors, applied mathematics, introduction to field theory and other mathematics topics. This course may be repeated twice for credit with different topics for a total of nine credits.

Mathematics: Other Approved Courses

MATH 107 Principles of Mathematics I (3 credits)
Prerequisite: Mathematics placement test
Topics include problem solving; numeric and non-numeric patterns; set theory and applications, systems of numeration; elementary
number theory and properties of our number systems from integers to reals. Offered yearly. (CMAR)

MATH 108 Principles of Mathematics II (3 credits)
Prerequisite: MATH 107
Topics include functions and relations; elementary probability; an introduction to data analysis and statistics; two- and three- dimensional
geometry; and measurement. (CMAR)

MATH 520 Real Analysis

- MEDIA

MEDI 199 First Year Seminar (3 credits)
Prerequisite: Open to all freshmen with a writing placement score of 3 or above or a SAT score of 500 or above. Students with 24 or more
transfer credits will have this requirement waived.
First Year Seminars (FYS) are writing-intensive, topic courses that introduce students to academic thought, discourse and practices. FYS
courses prepare and orient students toward productive and fulfilling college careers by actively engaging them in a specific academic area
of interest. Students will improve their writing, reading, research and basic information and technology skills while learning to work both
collaboratively and independently. These courses will fulfill the First Year Seminar requirement and may fulfill other requirements for the
core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one FYS course may be taken
for credit. (CFYS)

MEDI 298 Second Year Seminar (Speaking Intensive) (3 credits)
Prerequisite: M _____ 199; Open to all sophomores and juniors who have completed ENGL 101, and the speaking skills requirement.
Students with 54 or more transfer credits will have this requirement waived. Cannot be taken if M _____ 299 is taken for credit.
Second Year Seminars (SYS) are speaking-intensive, topic courses that build on the academic skills and habits introduced in the First
Year Seminar. SYS courses engage students in a specific academic area of interest and provide them with the opportunity to reinforce,
share and interpret knowledge. Students will improve their speaking, reading, research and basic information and technology skills while
building the connections between scholarship and action that are required for lifelong learning. These courses will fulfill the Second Year
Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics
may change each semester. Only one SYS course may be taken for credit. (CSYS)

MEDI 299 Second Year Seminar (Writing Intensive) (3 credits)
Prerequisite: M _____ 199; Open to all sophomores and juniors who have completed ENGL 101 and ENGL 102. Students with 54 or more
transfer credits will have this requirement waived. Cannot be taken if M _____ 298 is taken for credit.
Second Year Seminars (SYS) are writing-intensive, topic courses that build on the academic skills and habits introduced in the First Year
Seminar. SYS courses engage students in a specific academic area of interest and provide them with the opportunity to reinforce, share
and interpret knowledge. Students will improve their writing, reading, research and basic information and technology skills while building
the connections between scholarship and action that are required for lifelong learning. These courses will fulfill the Second Year Seminar
requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may
change each semester. Only one SYS course may be taken for credit. (CSYS)

- MIDDLE SCHOOL EDUCATION

(See also EDHM)

MSED 199 First Year Seminar (3 credits)
Prerequisite: Open to all freshmen with a writing placement score of 3 or above or a SAT score of 500 or above. Students with 24 or more
transfer credits will have this requirement waived.
First Year Seminars (FYS) are writing-intensive, topic courses that introduce students to academic thought, discourse and practices. FYS
courses prepare and orient students toward productive and fulfilling college careers by actively engaging them in a specific academic area
of interest. Students will improve their writing, reading, research and basic information and technology skills while learning to work both
collaboratively and independently. These courses will fulfill the First Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one FYS course may be taken for credit. (CFYS)

**MSED 298  Second Year Seminar (Speaking Intensive) (3 credits)**
*Prerequisite:_ __ __ 199; Open to all sophomores and juniors who have completed ENGL 101, and the speaking skills requirement. Students with 54 or more transfer credits will have this requirement waived. Cannot be taken if _ __ __ 299 is taken for credit.*

Second Year Seminars (SYS) are speaking-intensive, topic courses that build on the academic skills and habits introduced in the First Year Seminar. SYS courses engage students in a specific academic area of interest and provide them with the opportunity to reinforce, share and interpret knowledge. Students will improve their speaking, reading, research and basic information and technology skills while building the connections between scholarship and action that are required for lifelong learning. These courses will fulfill the Second Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one SYS course may be taken for credit. (CSYS)

**MSED 299  Second Year Seminar (Writing Intensive) (3 credits)**
*Prerequisite:_ __ __ 199; Open to all sophomores and juniors who have completed ENGL 101 and ENGL 102. Students with 54 or more transfer credits will have this requirement waived. Cannot be taken if _ __ __ 298 is taken for credit.*

Second Year Seminars (SYS) are writing-intensive, topic courses that build on the academic skills and habits introduced in the First Year Seminar. SYS courses engage students in a specific academic area of interest and provide them with the opportunity to reinforce, share and interpret knowledge. Students will improve their writing, reading, research and basic information and technology skills while building the connections between scholarship and action that are required for lifelong learning. These courses will fulfill the Second Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one SYS course may be taken for credit. (CSYS)

**MSED 450  Strategies of Teaching in the Middle School - History/Political Science (3 credits)**
*Prerequisite: Admission to the Professional Education Program.*

Developing competency and versatility is stressed through simulations and guided teaching in area schools. Students register for the course appropriate to their major.

**MSED 451  Strategies of Teaching in the Middle School – English (3 credits)**
*Prerequisite: Admission to the Professional Education Program.*

Developing competency and versatility is stressed through simulations and guided teaching in area schools. Students register for the course appropriate to their major.

**MSED 456  Strategies of Teaching in the Middle School – Mathematics (3 credits)**
*Prerequisite: Admission to the Professional Education Program.*

Developing competency and versatility is stressed through simulations and guided teaching in area schools. Students register for the course appropriate to their major.

**MSED 465  Strategies of Teaching in the Middle School - Integrated Science (3 credits)**
*Prerequisite: EDHM 210, EDHM 235 and EDHM 335 and admission to the Professional Education Program Strategies, including methods, materials and media, for teaching particular disciplines are studied.*

Developing competency and versatility is stressed through simulations and guided teaching in area schools. Students register for the course appropriate to their major.

**MSED 499  Directed Study in Middle School Education (1-6 credits)**
*Prerequisite: Consent of the department; formal application required*

Directed study is open to juniors, seniors and postbaccalaureate students who have demonstrated critical and analytical abilities in their studies and who wish to pursue a project independently. This course may be taken twice for a maximum of six credits. The adviser's permission is required.

**MSED 503  Directed Study (1-3 credits)**
*Prerequisite: Consent of the department; formal application required*

Directed study is designed for the graduate student who desires to study selected topics in a specific field. For details, consult the paragraph titled “Directed or Independent Study” in the “College of Graduate Studies” section of this catalog. This course may be repeated for a maximum of six credits.

**Middle School Education: Other Approved Courses**

**MSED 502  Research**
MUSIC

MUSC 109  Beginning African Drumming Ensemble (1 credit)
This course will introduce students to some of the intrinsic elements of African music through the process of actual music making within an ensemble setting. Designed for beginners with no musical or drumming background, this course will give students a firm foundation in African drumming and in the performance of repertoire from the West African countries of Guinea, Senegal and Mali. This course may be repeated. Music majors may only take the course twice for credit toward major requirements.

MUSC 112  Wind Ensemble (1 credit)
The wind ensemble is open to any student who plays a woodwind, brass, or percussion instrument. The wind ensemble performs significant literature, which is selected to stimulate both the musicians and the audience. The course may be repeated for credit. Either semester.

MUSC 113  Jazz Band (1 credit)
Prerequisite: Audition
The jazz band is open by audition on the first Thursday of the fall semester and limited to 20 musicians who wish to perform in the big band style. Performances provide the student with an opportunity to apply musical skills acquired through practice and rehearsal. The course may be repeated for credit. Either semester.

MUSC 115  Instrumental Ensemble (1 credit)
Prerequisite: Consent of instructor
The Instrumental Ensemble is a mixed group of instrumentalists that studies and performs appropriate works. The course may be repeated for credit. Either semester.

MUSC 118  Chorale (1 credit)
A group of mixed voices who study and perform compositions representative of various styles, periods and cultures. Performances presented throughout the academic year often include major works with orchestral accompaniment. The course may be repeated for credit. Either semester.

MUSC 119  Vocal Ensemble (1 credit)
Prerequisite: Concurrent enrollment in MUSC 118 and audition A select group of mixed voices who study and perform chamber vocal music representative of various styles, periods and cultures. This a cappella ensemble represents the college both in the United States and abroad. Either semester.

MUSC 120  Class Guitar I (Classical Guitar) (3 credits)
This course is an introduction to the fundamentals of classical guitar playing for those with or without prior experience. Through the performance of classical music, folk songs, American spirituals and pop melodies, the beginning guitar student will learn to read music, grasp basic theory, understand terminology and identify the different stylistic periods in music. Either semester. (CFPA)

MUSC 121  Performance Studies I (Private Lessons - Brass) (1 credit)
Prerequisite: Consent of instructor for 200 level and above only
The sequence provides private instruction for those students who wish to improve their proficiency in playing brass instruments. The material is selected according to the ability of the student. The lessons are for a one-hour period per week. The course may be repeated for credit. Either semester. Additional fee required. May be taken for graduate-level credit.

MUSC 122  Performance Studies I (Private Lessons - Percussion) (1 credit)
Prerequisite: Consent of instructor for 200 level and above only
The sequence provides private instruction for those students who wish to improve their proficiency in playing percussion instruments. The material is selected according to the ability of the student. The lessons are for a one-hour period per week. The course may be repeated for credit. Either semester. Additional fee required. May be taken for graduate-level credit.

MUSC 123  Performance Studies I (Private Lessons - Violin, Viola) (1 credit)
Prerequisite: Consent of instructor for 200 level and above only
The sequence provides private instruction for those students who wish to improve their proficiency in playing upper string instruments. The
material is selected according to the ability of the student. The course may be repeated for credit. The lessons are for a one-hour period per week. 

**MUSC 124 Performance Studies I (Private Lessons - Woodwinds) (1 credit)**

*Prerequisite: Consent of instructor for 200 level and above only*

The sequence provides private instruction for those students who wish to improve their proficiency in playing woodwind instruments. The material is selected according to the ability of the student. The course may be repeated for credit. The lessons are for a one-hour period per week. 

*Either semester. Additional fee required. May be taken for graduate-level credit.*

**MUSC 125 Performance Studies I (Private Lessons - Guitar) (1 credit)**

*Prerequisite: Consent of instructor for 200 level and above only*

The sequence provides private instruction for those students who wish to improve their proficiency in playing the instrument. The material is selected according to the ability of the student. The course may be repeated for credit. The lessons are for a one-hour period per week. 

*Either semester. Additional fee required. May be taken for graduate-level credit.*

**MUSC 126 Performance Studies I (Private Lessons - Cello, Bass) (1 credit)**

*Prerequisite: Consent of instructor for 200 level and above only*

The sequence provides private instruction for those students who wish to improve their proficiency in playing lower string instruments. The material is selected according to the ability of the student. The course may be repeated for credit. The lessons are for a one-hour period per week. 

*Either semester. Additional fee required. May be taken for graduate-level credit.*

**MUSC 130 Voice Class I (3 credits)**

Through the performance of songs of different nationalities, the student gains knowledge of basic vocal technique, general musicianship and terminology. 

*Either semester. (CFPA)*

**MUSC 131 Performance Studies I (Private Lessons - Voice - Singing) (1 credit)**

*Prerequisite: Consent of instructor for 200 level and above only*

The sequence provides private instruction for those students who wish to improve their ability in singing. The material is selected according to the ability of the student. The course may be repeated for credit. The lessons are for a one-hour period per week. 

*Either semester. Additional fee required. May be taken for graduate-level credit.*

**MUSC 140 Class Piano I (3 credits)**

Through the performance of compositions by master composers and arrangements of symphonic literature, folk songs, spirituals, seasonal and patriotic songs, the beginning piano student learns basic piano technique, elementary theory, general musicianship, terminology and the different stylistic periods in music. 

*Either semester. (CFPA)*

**MUSC 141 Performance Studies I (Private Lessons - Piano) (1 credit)**

*Prerequisite: Consent of instructor for 200 level and above only*

The sequence provides private instruction for those students who wish to improve their ability at the keyboard. The material is selected according to the ability of the student. The course may be repeated for credit. The lessons are for a one-hour period per week. 

*Either semester. Additional fee required. May be taken for graduate-level credit.*

**MUSC 151 Jazz, Pop and Show Choir (1 credit)**

This course is intended to offer students a choral experience in musical styles other than classic. Students will prepare and perform a mix of jazz and other popular styles of music. This course may be repeated for up to two credits.

**MUSC 152 Opera Ensemble (1 credit)**

*Prerequisite: Concurrent enrollment in MUSC 131*

This course will encourage young singers to explore the physical aspect of singing through repertoire that will be staged and performed. Singers will work to articulate vocal pieces from operatic literature through dramatic enactment. Course work will culminate in a performance of the chosen musical selections. This class may be repeated two times for credit.

**MUSC 160 Introduction to Western Classical Music (3 credits)**

This course, designed for students with no previous musical training, explores art music of the Western world and gives the beginner the knowledge and skills necessary for more informed listening. Music surveyed may include symphonies, concerti, songs, operas and other works, from various historical periods. 

*Either semester. (CFPA)*

**MUSC 162 Music of Africa (3 credits)**

This course surveys the musical traditions of Africa with their diverse social and cultural contexts. Instruments, ensembles and characteristics of music from several parts of the continent will be considered. 

*Either semester. (CFPA; CGCL)*

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MUSC 163   Introduction to World Music (3 credits)
This course surveys selected musical traditions from various parts of the world including those of Asia, Eastern Europe, the Caribbean, the Middle East and the Americas (including Native American and Latin American music). Topics include musical genres, instruments and social and cultural contexts. Either semester. (CFPA; CGCL)

MUSC 165   Introduction to Women Composers (3 credits)
This course surveys the contributions of women composers to the Western art music tradition, from the medieval period through the 20th century, with attention to historical and sociological contexts as well as fundamental concepts in art music. (CFPA)

MUSC 166   Survey of American Jazz (3 credits)
This course traces the development of jazz from 1890 to the present, noting its origins, its place in mainstream American music and its influence on other American and European musical styles. Either semester. (CFPA; CMCL)

MUSC 168   American Popular Music (3 credits)
This course will study the contemporary trends of American music beginning with the jazz era and continuing through recent decades. It will trace the social and political forces that created and shaped popular music during times of war and crisis. Students will study the elements that make up this music and learn how these styles developed. Students will listen to representative examples of the music of this period with emphasis on the factors that led to its invention. Offered every semester. (CFPA)

MUSC 170   Music Fundamentals (3 credits)
A course designed for beginners who wish to develop music literacy. Pitch, rhythm, chords, and major and minor scales are among the topics studied. Evaluations are based on both written work and musical performance. Either semester. (CFPA)

MUSC 183   String Ensemble (1 credit)
The string ensemble is open by audition to all students of the college. The group performs standard and contemporary chamber music selected to showcase the strengths of the ensemble. The course may be repeated for credit. Either semester. (CFPA)

MUSC 191   Introduction to Music Technology (3 credits)
This introduction to music technology explores the growth and evolution of the field. Students get practical experience with hardware and software, working at a MIDI station with several leading programs.

MUSC 199   First Year Seminar (3 credits)
Prerequisite: Open to all freshmen with a writing placement score of 3 or above or a SAT score of 500 or above or who have completed ENGL 101. Students with 24 or more transfer credits will have this requirement waived.
First Year Seminars (FYS) are writing-intensive, topic courses that introduce students to academic thought, discourse and practices. FYS courses prepare and orient students toward productive and fulfilling college careers by actively engaging them in a specific academic area of interest. Students will improve their writing, reading, research and basic information and technology skills while learning to work both collaboratively and independently. These courses will fulfill the First Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one FYS course may be taken for credit. (CFYS)

MUSC 221   Performance Studies II (Private Lessons - Brass) (1 credit)
Prerequisite: Consent of instructor for 200 level and above only
The sequence provides private instruction for those students who wish to improve their proficiency in playing brass instruments. The material is selected according to the ability of the student. The lessons are for a one-hour period per week. The course may be repeated for credit. Either semester. Additional fee required. May be taken for graduate-level credit.

MUSC 222   Performance Studies II (Private Lessons - Percussion) (1 credit)
Prerequisite: Consent of instructor for 200 level and above only
The sequence provides private instruction for those students who wish to improve their proficiency in playing percussion instruments. The material is selected according to the ability of the student. The lessons are for a one-hour period per week. The course may be repeated for credit. Either semester. Additional fee required. May be taken for graduate-level credit.

MUSC 223   Performance Studies II (Private Lessons - Violin, Viola) (1 credit)
Prerequisite: Consent of instructor for 200 level and above only
The sequence provides private instruction for those students who wish to improve their proficiency in playing upper string instruments. The material is selected according to the ability of the student. The course may be repeated for credit. The lessons are for a one-hour period per week. Either semester. Additional fee required. May be taken for graduate-level credit.

MUSC 224   Performance Studies II (Private Lessons - Woodwinds) (1 credit)
Prerequisite: Consent of instructor for 200 level and above only
The sequence provides private instruction for those students who wish to improve their proficiency in playing woodwind instruments. The material is selected according to the ability of the student. The course may be repeated for credit. The lessons are for a one-hour period per week. Either semester. Additional fee required. May be taken for graduate-level credit.

MUSC 225 Performance Studies II (Private Lessons - Guitar) (1 credit)
Prerequisite: Consent of instructor for 200 level and above only
The sequence provides private instruction for those students who wish to improve their proficiency in playing the instrument. The material is selected according to the ability of the student. The course may be repeated for credit. The lessons are for a one-hour period per week. Either semester. Additional fee required. May be taken for graduate-level credit.

MUSC 226 Performance Studies II (Private Lessons - Cello, Bass) (1 credit)
Prerequisite: Consent of instructor for 200 level and above only
The sequence provides private instruction for those students who wish to improve their proficiency in playing lower string instruments. The material is selected according to the ability of the student. The course may be repeated for credit. The lessons are for a one-hour period per week. Either semester. Additional fee required. May be taken for graduate-level credit.

MUSC 230 Voice Class II (3 credits)
Prerequisite: MUSC 130 or consent of instructor
This course is the continuation of Voice Class I, dealing with further development of singing technique and including class performances of different vocal styles represented by literature from various periods. Spring semester.

MUSC 231 Performance Studies II (Private Lessons - Voice - Singing) (1 credit)
Prerequisite: Consent of instructor for 200 level and above only
The sequence provides private instruction for those students who wish to improve their ability in singing. The material is selected according to the ability of the student. The course may be repeated for credit. The lessons are for a one-hour period per week. Either semester. Additional fee required. May be taken for graduate-level credit.

MUSC 232 Diction for Singers (3 credits)
Prerequisite: MUSC 130 or consent of instructor
This course instructs singers to produce clear, intelligible diction while maintaining a melodic line and correct intonation in standard English, Italian/Latin, French and German vocal repertory. The foreign language being used by the choral or chamber singers may be included as an area of study.

MUSC 240 Class Piano II (3 credits)
Prerequisite: MUSC 140 or consent of instructor
The continuation of Class Piano I presents a detailed study of works from the Baroque to the Contemporary periods. The student gains facility in the art of phrasing, use of dynamics and attention to tempos. Spring semester. (CFPA)

MUSC 241 Performance Studies II (Private Lessons - Piano) (1 credit)
Prerequisite: Consent of instructor for 200 level and above only
The sequence provides private instruction for those students who wish to improve their ability at the keyboard. The material is selected according to the ability of the student. The course may be repeated for credit. The lessons are for a one-hour period per week. Either semester. Additional fee required. May be taken for graduate-level credit.

MUSC 270 Sight-Singing and Ear-Training I (3 credits)
Prerequisite: Must be taken concurrently with MUSC 271
This course enhances the student's aural skills, developing the understanding of musical notation through exercises in sight-reading and musical dictation.

MUSC 271 Music Theory I (3 credits)
Prerequisite: Must be taken concurrently with MUSC 270
This course covers beginning harmony and counterpoint: writing in small forms and chorale harmonization, written exercises, ear training and keyboard work.

MUSC 272 Sight-Singing and Ear-Training II (3 credits)
Prerequisite: MUSC 270 and concurrent enrollment in MUSC 273
The continuation of MUSC 270. Students achieve a high level of fluency by reading graded advanced unison, two-, three-, and four-part studies, as well as combined rhythmic and melodic dictation, and one- and two-part rhythmic exercises for aural proficiency. (Formerly MUSC 370)
MUSC 273  Music Theory II (3 credits)
Prerequisite: MUSC 271 and concurrent enrollment in MUSC 272
A continuing technical course in the study of 18th- and 19th- century harmony. Topics studied include seventh chords through chords of the augmented sixth, figured bass, analysis, harmonization of melody and counterpoint. Fall semester. (Formerly MUSC 172)

MUSC 281  Music History I (3 credits)
Prerequisite: ENGL 102 and MUSC 271; or consent of instructor
This course surveys the history of Western art music from the Middle Ages through the Baroque period, through score study, comparisons of musical styles, and attention to the social and cultural roles of composition and performance. Fall semester. (Formerly MUSC 261)

MUSC 282  Music History II (3 credits)
Prerequisite: ENGL 102 and MUSC 271 and MUSC 281; or consent of instructor
This course surveys the history of Western art music from the Classical period to the present day, through score study, comparisons of music styles and attention to the social and cultural roles of composition and performance. Spring semester. (Formerly MUSC 262)

MUSC 298  Second Year Seminar (Speaking Intensive) (3 credits)
Prerequisite: _ _ _ _ 199; Open to all sophomores and juniors who have completed ENGL 101, and the speaking skills requirement. Students with 54 or more transfer credits will have this requirement waived. Cannot be taken if _ _ _ _ 299 is taken for credit. Second Year Seminars (SYS) are speaking-intensive, topic courses that build on the academic skills and habits introduced in the First Year Seminar. SYS courses engage students in a specific academic area of interest and provide them with the opportunity to reinforce, share and interpret knowledge. Students will improve their speaking, reading, research and basic information and technology skills while building the connections between scholarship and action that are required for lifelong learning. These courses will fulfill the Second Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one SYS course may be taken for credit. (CSYS)

MUSC 299  Second Year Seminar (Writing Intensive) (3 credits)
Prerequisite: _ _ _ _ 199; Open to all sophomores and juniors who have completed ENGL 101 and ENGL 102. Students with 54 or more transfer credits will have this requirement waived. Cannot be taken if _ _ _ _ 299 is taken for credit. Second Year Seminars (SYS) are writing-intensive, topic courses that build on the academic skills and habits introduced in the First Year Seminar. SYS courses engage students in a specific academic area of interest and provide them with the opportunity to reinforce, share and interpret knowledge. Students will improve their writing, reading, research and basic information and technology skills while building the connections between scholarship and action that are required for lifelong learning. These courses will fulfill the Second Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one SYS course may be taken for credit. (CSYS)

MUSC 321  Performance Studies III (Private Lessons - Brass) (1 credit)
Prerequisite: Consent of instructor for 200 level and above only
The sequence provides private instruction for those students who wish to improve their proficiency in playing brass instruments. The material is selected according to the ability of the student. The lessons are for a one-hour period per week. The course may be repeated for credit. Either semester. Additional fee required. May be taken for graduate-level credit.

MUSC 322  Performance Studies III (Private Lessons - Percussion) (1 credit)
Prerequisite: Consent of instructor for 200 level and above only
The sequence provides private instruction for those students who wish to improve their proficiency in playing percussion instruments. The material is selected according to the ability of the student. The lessons are for a one-hour period per week. The course may be repeated for credit. Either semester. Additional fee required. May be taken for graduate-level credit.

MUSC 323  Performance Studies III (Private Lessons - Violin, Viola) (1 credit)
Prerequisite: Consent of instructor for 200 level and above only
The sequence provides private instruction for those students who wish to improve their proficiency in playing upper string instruments. The material is selected according to the ability of the student. The course may be repeated for credit. The lessons are for a one-hour period per week. Either semester. Additional fee required. May be taken for graduate-level credit.

MUSC 324  Performance Studies III (Private Lessons - Woodwinds) (1 credit)
Prerequisite: Consent of instructor for 200 level and above only
The sequence provides private instruction for those students who wish to improve their proficiency in playing woodwind instruments. The material is selected according to the ability of the student. The course may be repeated for credit. The lessons are for a one-hour period per week. Either semester. Additional fee required. May be taken for graduate-level credit.

MUSC 325  Performance Studies III (Private Lessons - Guitar) (1 credit)
MUSC 326 Performance Studies III (Private Lessons - Cello, Bass) (1 credit)
Prerequisite: Consent of instructor for 200 level and above only
The sequence provides private instruction for those students who wish to improve their proficiency in playing lower string instruments. The material is selected according to the ability of the student. The course may be repeated for credit. The lessons are for a one-hour period per week. Either semester. Additional fee required. May be taken for graduate-level credit.

MUSC 331 Performance Studies III (Private Lessons - Voice - Singing) (1 credit)
Prerequisite: Consent of instructor for 200 level and above only
The sequence provides private instruction for those students who wish to improve their ability in singing. The material is selected according to the ability of the student. The course may be repeated for credit. The lessons are for a one-hour period per week. Either semester. Additional fee required. May be taken for graduate-level credit.

MUSC 332 Vocal Pedagogy (3 credits)
Prerequisite: MUSC 231 or consent of instructor
In this course singers and choral conductors will acquire specific skills and experience in teaching healthy vocal production and development. The course reviews the anatomy and function of the voice, hearing and breathing mechanisms and covers recent advancements in scientific vocal knowledge. Emphasis will be placed on bel-canto singing technique, proper care of the singing and speaking voice, the healthy development of the singing/speaking voice and the nurturance of young voices. Offered every other year.

MUSC 341 Performance Studies III (Private Lessons - Piano) (1 credit)
Prerequisite: Consent of instructor for 200 level and above only
The sequence provides private instruction for those students who wish to improve their ability at the keyboard. The material is selected according to the ability of the student. The course may be repeated for credit. The lessons are for a one-hour period per week. Either semester. Additional fee required. May be taken for graduate-level credit.

MUSC 342 Piano Pedagogy (3 credits)
Prerequisite: MUSC 240 or consent of instructor
This course is designed as an introduction to teaching piano and will function as a survey of teaching materials as well as hands-on skills based learning. The course primarily focuses on the needs of the beginning student, child or adult, and will explore issues that teachers encounter in both private piano studios as well as the group piano setting. Offered every other year.

MUSC 351 Conducting (3 credits)
Prerequisite: MUSC 281 or MUSC 282 or consent of instructor
Designed for the beginning choral or instrumental conductor, this course includes basic conducting patterns, score reading and analysis, baton and rehearsal techniques.

MUSC 363 Music of Bach, Handel and Vivaldi (3 credits)
Prerequisite: MUSC 281
This in-depth study of music by Bach, Handel and Vivaldi focuses on representative works from several genres, including cantata, oratorio, concerto, suite and sonata. (CWRM)

MUSC 364 Music of the Classical and Romantic Periods (3 credits)
Prerequisite: MUSC 282
An in-depth study of music of the Classical and Romantic eras focusing on the history and styles of the symphony, sonata, song, string quartet, opera and other genres. (CWRM)

MUSC 367 Music by Women Composers (3 credits)
Prerequisite: MUSC 281 or MUSC 282
This course surveys Western art music composed by women, with attention to sociological and cultural issues as well as analysis of music from several periods and genres. (CWRM)

MUSC 369 Music of the 20th Century (3 credits)
Prerequisite: MUSC 282
This course explores the diverse compositional techniques, genres, and styles of 20th-century American and European art music. Representative works by Stravinsky, Schoenberg, Ives, Bartok, Copland, Cage, Berio, Adams and others will be examined from analytical and historical viewpoints.

MUSC 371 Counterpoint (3 credits)
Prerequisite: MUSC 273
An analytical and practical exploration of melodic and contrapuntal techniques, relying upon extensive student exercises in composition and singing; emphasis on styles of the 16th through the 18th centuries.

MUSC 372 Form and Analysis of Music I: 1700-1900 (3 credits)
Prerequisite: MUSC 273
A study of the musical forms associated with the Classical and Romantic periods. Emphasis will be placed on the study of small and large forms focusing on the development of the harmonic language of the 18th and 19th centuries.

MUSC 373 Composition I (3 credits)
Prerequisite: MUSC 273
A technical and practical exploration of the materials and methods of musical composition centered around the students' own creative exercises.

MUSC 375 Orchestration and Arranging (3 credits)
Prerequisite: MUSC 273 and MUSC 282
Students will learn principles of score mechanics, vocal and instrumental ranges and capabilities, and apply that knowledge in musical assignments for a variety of ensembles.

MUSC 388 Instrumental Techniques (3 credits)
Prerequisite: MUSC 281 or MUSC 282 or consent of instructor
Students will learn assembly, maintenance, performance and pedagogy for the four main families of orchestral instruments (woodwinds, brass, percussion and strings).

MUSC 399 Special Topics in Music (3 credits)
A topic of special interest to faculty and/or students will be explored; emphasis may be on history, theory or performance. This course may be taken more than once.

MUSC 421 Performance Studies IV (Private Lessons - Brass) (1 credit)
Prerequisite: Consent of instructor for 200 level and above only
The sequence provides private instruction for those students who wish to improve their proficiency in playing brass instruments. The material is selected according to the ability of the student. The lessons are for a one-hour period per week. The course may be repeated for credit. Either semester. Additional fee required. May be taken for graduate-level credit.

MUSC 422 Performance Studies IV (Private Lessons - Percussion) (1 credit)
Prerequisite: Consent of instructor for 200 level and above only
The sequence provides private instruction for those students who wish to improve their proficiency in playing percussion instruments. The material is selected according to the ability of the student. The lessons are for a one-hour period per week. The course may be repeated for credit. Either semester. Additional fee required. May be taken for graduate-level credit.

MUSC 423 Performance Studies IV (Private Lessons - Violin, Viola) (1 credit)
Prerequisite: Consent of instructor for 200 level and above only
The sequence provides private instruction for those students who wish to improve their proficiency in playing upper string instruments. The material is selected according to the ability of the student. The course may be repeated for credit. The lessons are for a one-hour period per week. Either semester. Additional fee required. May be taken for graduate-level credit.

MUSC 424 Performance Studies IV (Private Lessons - Woodwinds) (1 credit)
Prerequisite: Consent of instructor for 200 level and above only
The sequence provides private instruction for those students who wish to improve their proficiency in playing woodwind instruments. The material is selected according to the ability of the student. The course may be repeated for credit. The lessons are for a one-hour period per week. Either semester. Additional fee required. May be taken for graduate-level credit.

MUSC 425 Performance Studies IV (Private Lessons - Guitar) (1 credit)
Prerequisite: Consent of instructor for 200 level and above only
The sequence provides private instruction for those students who wish to improve their proficiency in playing the instrument. The material
is selected according to the ability of the student. The course may be repeated for credit. The lessons are for a one-hour period per week.

*Either semester. Additional fee required. May be taken for graduate-level credit.*

**MUSC 426** Performance Studies IV (Private Lessons - Cello, Bass) (1 credit)

Prerequisite: Consent of instructor for 200 level and above only

The sequence provides private instruction for those students who wish to improve their proficiency in playing lower string instruments. The material is selected according to the ability of the student. The course may be repeated for credit. The lessons are for a one-hour period per week. *Either semester. Additional fee required. May be taken for graduate-level credit.*

**MUSC 431** Performance Studies IV (Private Lessons - Voice - Singing) (1 credit)

Prerequisite: Consent of instructor for 200 level and above only

The sequence provides private instruction for those students who wish to improve their ability in singing. The material is selected according to the ability of the student. The course may be repeated for credit. The lessons are for a one-hour period per week. *Either semester. Additional fee required. May be taken for graduate-level credit.*

**MUSC 440** Advanced Keyboard Skills (3 credits)

Prerequisite: MUSC 240

This course teaches advanced keyboard musicianship skills that lead to facility in the harmonization of melodies, transposition, score reading, figured bass realization and lead sheet chord symbols interpretation. *May be taken for graduate-level credit.*

**MUSC 441** Performance Studies IV (Private Lessons - Piano) (1 credit)

Prerequisite: Consent of instructor for 200 level and above only

The sequence provides private instruction for those students who wish to improve their ability at the keyboard. The material is selected according to the ability of the student. The course may be repeated for credit. The lessons are for a one-hour period per week. *Either semester. Additional fee required. May be taken for graduate-level credit.*

**MUSC 455** Creative Activities in Elementary School Music (3 credits)

Prerequisite: MUSC 170 or consent of instructor

This course is designed to develop analytical thinking and practical skills related to teaching vocal and general music in the primary and intermediate grades. Emphasis is on teaching craft, curriculum development and the vocal mechanism for this level. *Fall semester, every other year. (Formerly MUSC 355) May be taken for graduate-level credit.*

**MUSC 456** Methods in Music Education (3 credits)

Prerequisite: MUSC 273 or consent of instructor

This course will examine the instructional approaches of Emile Jaques-Dalcroze, Zoltan Kodaly, Carl Orff and Edwin Gordon, and the use of each in school music settings. Emphasis will be placed upon the instructional use of each with respect to singing, moving, instrument playing, listening and creative experiences. *May be taken for graduate-level credit.*

**MUSC 458** Introduction to Orff Schulwerk (3 credits)

Prerequisite: MUSC 271 and MUSC 273; or consent of instructor

This is a two-week intensive workshop introducing basic principles and practices of the Orff Schulwerk approach to teaching music. Taught by a certified Orff instructor, this course incorporates interactive participation in music and movement and develops and applies basic skills in movement, speech, singing and playing instruments. Especially valuable for elementary and middle school teachers. *May be taken for graduate-level credit.*

**MUSC 472** Form and Analysis II: The 20th Century (3 credits)

Prerequisite: MUSC 372 or consent of instructor

The materials and techniques of 20th-century art music will be examined within a technical and historical context, with special attention to post-tonal styles. Students will learn to and analyze representative works of leading composers, developing their ability to recognize and describe styles of the 20th century.

**MUSC 483** Choral Techniques (3 credits)

Prerequisite: MUSC 351 and MUSC 440; or consent of instructor

This course will fulfill one of the subject matter knowledge areas necessary for provisional/full certification. Subjects will include advanced conducting and rehearsal techniques, a study of style and interpretation, and the development of the choral sound. Planning, organizing and evaluating the choral program and its participants will also be part of the curriculum. *May be taken for graduate-level credit.*

**MUSC 499** Directed Study in Music (1-3 credits)
Directed study is open to juniors and seniors who have demonstrated critical and analytical abilities in their studies and who wish to pursue a project independently. This course may be taken twice for a maximum of six credits. Offered either semester.

**MUSC 503 Directed Study (1-3 credits)**

*Prerequisite: Consent of the department; formal application required*

Directed study is designed for the graduate student who desires to study selected topics in a specific field. For details consult the paragraph titled “Directed or Independent Study” in the “School of Graduate Studies” section of this catalog. This course may be repeated for a maximum of six credits.

**MUSC 552 Seminar in Music Education Problems (3 credits)**

*Prerequisite: An undergraduate degree in music; at least one music education course, which may be satisfied by: EDHM 413, MUSC 413, MUSC 455, MUSC 456 or equivalent; or consent of instructor*

This course will provide a forum for music educators to discuss and analyze issues and problems that arise in the current music education environment. It will provide graduate students in music education with relevant information about current trends, methodologies and techniques used in contemporary music education.

**MUSC 558 Orff Schulwerk Teacher Training: Level I (3 credits)**

*Prerequisite: A bachelor’s degree in music or equivalent; and consent of the workshop director*

This is a two-week intensive workshop introducing basic principles and practices of the Orff Schulwerk approach to teaching music. Taught by a certified Orff instructor, this course incorporates interactive participation in music and movement and develops and applies basic skills in movement, speech, singing and playing instruments. The course follows the guidelines established by American Orff Schulwerk Association (AOSA) for Level I certification. Offered in summer only.

**MUSC 559 Orff Schulwerk Teacher Training; Level II (3 credits)**

*Prerequisite: MUSC 558*

This is a two-week intensive workshop extending basic principles and practices of the Orff Schulwerk approach and providing more advanced training in composition as well as pedagogical practice. Taught by a certified Orff instructor, this course continues application of basic skills in movement, speech, singing and playing instruments and develops further understanding of diatonic composition and practice and use of complex and mixed meter. The course follows the guidelines established by American Orff Schulwerk Association (AOSA) for Level II certification. Offered in summer only.

**MUSC 562 Orff Schulwerk Teacher Training: Level III (3 credits)**

*Prerequisite: MUSC 559*

This is a two-week intensive workshop for those who have satisfactorily completed a Level II course and who have Orff teaching experience. The materials, techniques, and activities are designed for the more advanced Orff Schulwerk student. The course will include study of modes and mixtures, orchestration of original material, and improvisation in modes and asymmetric meters. Development of advanced soprano and alto recorder techniques will be continued, and ensemble performance with all voices of recorders will be included. The course follows guidelines established by American Orff Schulwerk.

**MUSC 564 Music in the Arts: A Cultural Perspective (3 credits)**

This course will emphasize developments in music from a larger cultural perspective. The role of music will be analyzed in the context of other fine and performing arts such as painting, sculpture, theater and dance. The aim of this comparative approach is to broaden the understanding of music, placing it within a larger cultural, social and artistic framework.

**MUSC 569 Foundations in Music Education (3 credits)**

*Prerequisite: Matriculation in the MAT in Music or consent of either instructor or department chairperson*

This course examines and analyzes philosophical, historical, sociological and psychological issues affecting the teaching and learning of music in school settings. Emphasis will be placed upon a scholarly investigation of critical issues related to the music education profession. Students will also be expected to determine the purposes and functions of music in American schools in relation to efficient and effective planning of curriculum and instruction. Massachusetts Frameworks and the National Standards will be incorporated into these topics.

**MUSC 575 Techniques for Arranging Classroom and Concert Music (3 credits)**

This course is intended to provide K-12 music educators with skills and techniques in arranging extant music for the particulars of specific classroom and public school ensembles, both vocal and instrumental.

**Music: Other Approved Courses**

- MUSC 374 Composition II
- MUSC 413 Advanced Choral Conducting
MUSC 457   School Music Programming (3 credits)
Prerequisite: MUSC 351
Students will learn principles of managing, organizing and administering a school music program. Course topics range from recruiting to cooperating with parent's organizations. Students will network with local school directors and learn evaluation and assessment procedures. May be taken for graduate-level credit.

MUSC 473   Composition III
MUSC 474   Composition IV

PHILOSOPHY

Only one three-credit course from the following may be taken for credit:

PHIL 101 Reasoning and Value
PHIL 102 Reasoning and Human Nature
PHIL 103 Reasoning and Politics
PHIL 104 Reasoning and Religion
PHIL 105 Reasoning and Science
PHIL 111 Foundations of Logical Reasoning

PHIL 111   Foundations of Logical Reasoning (3 credits)
This course introduces the student to the intellectual foundations, conceptual frameworks and methodologies of logic. It examines the distinctions between arguments and nonarguments, premises and conclusions, deductive and inductive arguments, explicit and implicit premises, and key valid and invalid argument forms. It explores the kinds of reasons that are relevant to major foundational projects for acquisition and increase of knowledge, the function of logic in the context of theories about meaning, knowledge, values or reality, and how to apply logical reasoning to controversies in ethics, politics, science or religion. This course may be taken only once for credit. (CLOR)

PHIL 135   Freshman Honors Colloquium (1 credit)
Prerequisite: Open to Commonwealth Honors students and to others at the discretion of instructor
Freshman Honors Colloquia in philosophy allow exceptionally able students to explore a challenging topic in small classes under close faculty supervision. Colloquia meet once a week for 50 minutes and culminate in a paper or scientific project which provides the major part of the grade. The minimum enrollment is two and the maximum is 12. Topics vary from semester to semester. Fall semester.

PHIL 136   Freshman Honors Colloquium (1 credit)
Prerequisite: Open to Commonwealth Honors students and to others at the discretion of instructor
Freshman Honors Colloquia in philosophy allow exceptionally able students to explore a challenging topic in small classes under close faculty supervision. Colloquia meet once a week for 50 minutes and culminate in a paper or scientific project which provides the major part of the grade. The minimum enrollment is two and the maximum is 12. Topics vary from semester to semester. Spring semester.

PHIL 151   Introduction to Philosophy (3 credits)
This course serves as an introduction to philosophy. Students will be introduced to the field of philosophy through the examination of fundamental questions and issues involving the nature of reality, knowledge, morality and the human person. (CHUM)

PHIL 199   First Year Seminar (3 credits)
Prerequisite: Open to all freshmen with a writing placement score of 3 or above or a SAT score of 500 or above or who have completed ENGL 101. Students with 24 or more transfer credits will have this requirement waived.
First Year Seminars (FYS) are writing-intensive, topic courses that introduce students to academic thought, discourse and practices. FYS courses prepare and orient students toward productive and fulfilling college careers by actively engaging them in a specific academic area of interest. Students will improve their writing, reading, research and basic information and technology skills while learning to work both collaboratively and independently. These courses will fulfill the First Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one FYS course may be taken for credit. (CFYS)

PHIL 203   Happiness and the Meaning of Life (3 credits)
Prerequisite: One 100-level, three-credit course in philosophy
This course provides a framework for thinking about happiness and life’s meaning by considering such questions as: What is happiness and how can it be attained? Is happiness the main, or only, goal in living a good life? Does life have a meaning? Is living morally a
condition of having a good life? How are happiness and life's meaning affected by emotion, desire, reason, pleasure, suffering and death? *Offered alternate years.* (CHUM)

**PHIL 204**  *Sex and Personal Relations (3 credits)*

*Prerequisite: One 100-level, three-credit course in philosophy*

This course examines central topics in the philosophy of sex including questions such as: What is the philosophical significance of sex? Can we justify the distinction between good and bad sex? Moral and immoral sex? Normal and perverted sex? What is the language of sex? What is love and how is it related to reason and emotion? Can friendship be distinguished from love? Does prostitution or pornography degrade persons? *Offered alternate years.* (CHUM)

**PHIL 205**  *Medical Ethics (3 credits)*

*Prerequisite: One 100-level course in philosophy*

This course explores issues of life and death including questions such as: Is abortion ever justified? Is euthanasia ever justified? Does the patient ever have the right to refuse life-saving treatment? Does a doctor have the right to withhold information from patients? Do the parents or society have the right to determine what is the best treatment, if any, for a child? Is suicide ever justifiable? On what basis should limited medical resources be allocated? *Offered alternate years.* (CHUM)

**PHIL 211**  *Inductive Logic (3 credits)*

*Prerequisite: PHIL 111*

This course explores the ideas and techniques of inductive logic that are of use in understanding, developing and appraising inductive arguments as they occur in philosophy, education and science. Specifically, the course examines sampling and statistics, Mill's methods, the probability calculus, the traditional problem of induction, Goodman's paradox and the new problem of induction. (CHUM)

**PHIL 212**  *Philosophies of India (3 credits)*

*Prerequisite: One 100-level, three-credit course in philosophy*

This course examines some of the central ideas and issues found in past and contemporary Vedanta, Yoga, and Buddhism, especially as they illuminate Asian/Western misunderstanding and relationships. Emphasis will be placed on concepts of moral value, human nature, salvation, harmony and pluralism. *Offered alternate years.* (CGCL; CHUM; CMCL; CWRT)

**PHIL 213**  *Philosophies of China and Japan (3 credits)*

*Prerequisite: One 100-level, three-credit course in philosophy*

This course examines some of the central ideas and issues found in past and contemporary Confucianism, Taoism, Buddhism and Shintoism, especially as they illuminate Asian/Western misunderstandings and relationships. Emphasis will be placed on concepts of moral value, human nature, salvation, harmony and pluralism. *Offered alternate years.* (CGCL; CHUM; CWRT)

**PHIL 215**  *Environmental Ethics (3 credits)*

*Prerequisite: Three credits in philosophy*

What is the basis of distinctions between human and animal, culture and nature, domestic and wild, civilized and primitive, the ethical and the natural? This course will examine these issues by pursuing questions such as: Does the value of nature consist entirely in how it can be used by humans? Do animals exert a moral claim on humans? Does wilderness have value in itself? Is there an obligation to use natural resources for human welfare? Are famine, population growth and pollution merely economic issues of resource distribution? *Offered alternate years.* (CHUM)

**PHIL 216**  *Values and Technology (3 credits)*

*Prerequisite: One 100-level, three-credit course in philosophy*

The development and application of modern technology have influenced human choices, self-understanding, and social organization. This course will examine the value implications of controversies such as reproductive technologies and choice, censorship and privacy on the Internet, DNA research and its applications, advertising in the classroom, and monopoly control of communication technologies. *Offered alternate years.* (CHUM)

**PHIL 222**  *Philosophy of Law (3 credits)*

*Prerequisite: One 100-level, three-credit course in philosophy*

This course examines law and justice, the structure of legal reasoning, the nature and justification of the adversary system, lawyers' roles and ethics and questions such as: Should confidentiality, zealous advocacy, plea bargaining or the insanity defense be abolished? Is punishment morally defensible? What is the basis for legal interference with individual liberty? Do lawyers have an obligation to defend clients they find repulsive? *Offered alternate years.* (Formerly PHIL 322) (CHUM; CWRT)

**PHIL 225**  *Philosophy of Art (3 credits)*

*Prerequisite: One 100-level, three-credit course in philosophy*

This course examines philosophical questions arising in connection with the identification, interpretation and evaluation of art and its
creation and questions such as: What is art? Is there a valid way to distinguish art from non-art and good art from bad art? Are there ways to establish the meaning of a work of art, or is all interpretation subjective? Do artists have moral responsibilities as artists? Should the government subsidize art? Offered alternate years. (Formerly PHIL 325) (CHUM; CWRT)

PHIL 228 Philosophy of Religion (3 credits)
Prerequisite: One 100-level, three-credit course in philosophy
This course critically examines the nature and justification of religious claims, including discussion of: What are the grounds for belief or disbelief in God's existence? Is religious discourse meaningful? Do faith and reason conflict? Is belief in immortality intelligible and/or defensible? Is religious knowledge possible? Are revelation and religious experience reliable sources of truth? Is it rational to believe in miracles? Is atheism a religion? Offered alternate years. (Formerly PHIL 328) (CHUM; CWRT)

PHIL 229 Explaining the Paranormal (3 credits)
Prerequisite: One 100-level, three-credit course in philosophy
An application of ideas about personal experience, problem solving, evidence, observation, testimony, theory-acceptance, and proof to claims about paranormal phenomena including ESP, near-death experiences, UFO abductions, psychic forecasting, miracle cures, and reincarnation. The course considers the extent and limits of our ability to explain such phenomena as well as the arguments of those who are skeptical about the paranormal. Offered alternate years. (CHUM)

PHIL 231 Amoralism, Egoism and Altruism (3 credits)
Prerequisite: One 100-level, three-credit course in philosophy
This course discusses amoralism, egoism, and altruism as alternative life plans, raising such questions as: What is self-interest? Is being an egoist compatible with bonds of trust, friendship and love? Can we ever be true altruists? Is morality more rational than immorality? Are our ultimate life plans and commitments defensible? Why be moral? Offered alternate years. (Formerly PHIL 330) (CHUM; CWRT)

PHIL 232 Philosophy and Feminist Thought (3 credits)
Prerequisite: One 100-level, three-credit course in philosophy
This course examines issues in contemporary feminist thought as they have emerged from Western philosophy, such as: Are there distinctively feminist accounts of human nature, society and persons? Do interpretations of rationality, thought and experience reflect gender experiences? Do positions on moral issues reflect gender differences? Do feminist theories of gender, culture and power have social and political applications? Is feminism antimale? Offered alternate years. (Formerly PHIL 332) (CHUM; CMCL)

PHIL 234 Free Will, Determinism and Responsibility (3 credits)
Prerequisite: One 100-level, three-credit course in philosophy
This course examines main topics and problems in the philosophy of action and agency, including: What is free will and do we have it? Are our motives, desires, and intentions determined? When, if at all, are we responsible for what we do? What implications does free will (or its absence) have for autonomy and legal liability, as in the insanity defense? Offered alternate years. (Formerly PHIL 334) (CHUM; CWRT)

PHIL 235 Human Rights and Human Liberties (3 credits)
Prerequisite: One 100-level, three-credit course in philosophy
This course explores different theories of the grounding, nature, and scope of rights and liberties, such as: What does it mean to call something a “human right”? How should we understand liberty? Are there different conceptions of liberty underlying different political theories? Other topics include such things as the relation between rights and responsibility, the relation between a theory of morality and a system of legal rights, and the possible conflicts between liberty and community. (CHUM)

PHIL 242 Philosophy of Human Nature (3 credits)
Prerequisite: One 100-level course in philosophy
This course will be a study of ancient and modern theories of human nature. We will investigate topics such as freedom and determinism, good and evil, race and gender, mind and consciousness, and society and politics. Each of these topics will be considered as a possible aspect of human nature, in pursuit of the notion of a human self. (CHUM)

PHIL 247 Existentialism (3 credits)
Prerequisite: PHIL 111
Where do we come from? What are we? Where are we going? This course covers the existential analysis of the quest for meaning in a human's life. We will consider how we understand ourselves, the world and our relationship with the world. These considerations will include notions of self-identity, the role and limits of reason/rationality, the role of emotions and passions, the role of faith and religion, human freedom, views of the world self-estrangement, anxiety and fear, death and the relation of the self to other human beings. We will grapple with these questions as we analyze and interpret the philosophies of famous 'existentialist' thinkers such as Soren Kierkegaard, Friedrich Nietzsche, Martin Heidegger and Jean-Paul Sartre. (CHUM)
PHIL 248  Buddha, Socrates, Jesus (3 credits)
Prerequisite: One 100-level course in philosophy
Each of these major paradigms of human possibility — Buddha, Socrates, Jesus — represents a markedly different tradition — respectively, Indian, Greek, Jewish; a different understanding of religiosity — atheistic, agnostic, theistic; a different mode of religious practice — meditation, inquiry, fideism; a different hope for human possibility — release, understanding, salvation; and myriad interpretations by critics and followers alike of what their respective lives meant and mean. Students will be expected to discern and address the philosophical issues that arise out of these figures and develop in response their own considered views. Offered alternate years. (CGCL; CHUM; CWRT)

PHIL 260  Philosophy of Science (3 credits)
Prerequisite: PHIL 111
This course introduces students to foundational issues in the philosophy of science. Topics discussed may include issues such as the science/non-science distinction, the nature of scientific explanation, the interactions between theory and observation, causation and the existence of natural kinds. Also, some application issues may be discussed like whether science is objective, sexist or racist, or how to apply science to policy questions like school science curricula and funding of large-scale scientific initiatives. (CHUM)

PHIL 286  Sophomore Honors Colloquium (1 credit)
Prerequisite: Open to Commonwealth Honors students and to others at the discretion of instructor; and one 100-level, three-credit course in philosophy, and consent of instructor
Sophomore Honors Colloquia in philosophy allow exceptionally able students to explore a challenging topic in small classes under close faculty supervision. Colloquia meet once a week for 50 minutes and culminate in a paper or scientific project which provides the major part of the grade. The minimum enrollment is two and the maximum is 12. Topics vary from semester to semester. Fall semester.

PHIL 287  Sophomore Honors Colloquium (1 credit)
Prerequisite: Open to Commonwealth Honors students and to others at the discretion of instructor; and one 100-level, three-credit course in philosophy, and consent of instructor
Sophomore Honors Colloquia in philosophy allow exceptionally able students to explore a challenging topic in small classes under close faculty supervision. Colloquia meet once a week for 50 minutes and culminate in a paper or scientific project which provides the major part of the grade. The minimum enrollment is two and the maximum is 12. Topics vary from semester to semester. Fall semester.

PHIL 298  Second Year Seminar (Speaking Intensive) (3 credits)
Prerequisite: _ _ _ _ 199; Open to all sophomores and juniors who have completed ENGL 101, and the speaking skills requirement. Students with 54 or more transfer credits will have this requirement waived. Cannot be taken if _ _ _ _ 299 is taken for credit.
Second Year Seminars (SYS) are speaking-intensive, topic courses that build on the academic skills and habits introduced in the First Year Seminar. SYS courses engage students in a specific academic area of interest and provide them with the opportunity to reinforce, share and interpret knowledge. Students will improve their speaking, reading, research and basic information and technology skills while building the connections between scholarship and action that are required for lifelong learning. These courses will fulfill the Second Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one SYS course may be taken for credit. (CSYS)

PHIL 299  Second Year Seminar (Writing Intensive) (3 credits)
Prerequisite: _ _ _ _ 199; Open to all sophomores and juniors who have completed ENGL 101 and ENGL 102. Students with 54 or more transfer credits will have this requirement waived. Cannot be taken if _ _ _ _ 298 is taken for credit.
Second Year Seminars (SYS) are writing-intensive, topic courses that build on the academic skills and habits introduced in the First Year Seminar. SYS courses engage students in a specific academic area of interest and provide them with the opportunity to reinforce, share and interpret knowledge. Students will improve their writing, reading, research and basic information and technology skills while building the connections between scholarship and action that are required for lifelong learning. These courses will fulfill the Second Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one SYS course may be taken for credit. (CSYS)

PHIL 301  Plato and Aristotle (3 credits)
Prerequisite: One 100-level and one 200-level course in philosophy; or consent of instructor
This course examines selected works of Plato and Aristotle on such issues as the nature of philosophy, the method of inquiry, the ground and possibility of knowledge, the reality of form and psyche, deliberation and human good and the ideal society. Offered alternate years. (CGCL; CHUM; CWRT)

PHIL 302  Medieval Philosophy (3 credits)
Prerequisite: One 100-level and one 200-level course in philosophy; or consent of instructor
This course examines selected works of influential thinkers of the middle ages on such problems as the nature of the divine, universals and particulars, the nature of knowledge and truth, faith and reason, morality and society. The Arabic tradition and its relation to the Christian and Jewish traditions will be discussed. Offered alternate years. (CHUM; CWRT)
PHIL 303  Major Modern Philosophers (3 credits)  
Prerequisite: One 100-level and one 200-level course in philosophy; or consent of instructor  
This course examines selected works of the more prominent philosophers of the 17th and 18th centuries, including Descartes, Spinoza, Leibniz, Locke, Berkeley, Hume and Kant. It explores their metaphysical and epistemological views, as well as the systematic approaches they take to solving some difficult philosophical puzzles. (CGCL; CHUM; CWRT)

PHIL 304  19th Century Philosophy (3 credits)  
Prerequisite: One 100-level and one 200-level course in philosophy; or consent of instructor  
This course examines some of the predominant thinkers in the 19th century, and the philosophical questions addressing the tension between reason as a central aspect of human beings and nature on the one hand, and the collapse of reason and the human being’s possible descent into nihilism on the other. This tension will be examined in such topics as metaphysics, epistemology and ethics. The course will begin with Kant to help students move from 18th to 19th century philosophy, and then turn to German Idealism, Hegel, Mill, Schopenhauer, Kierkegaard and Nietzsche, and see not only how each philosopher responds to Kant and relates to one another, but also how they all help to influence various philosophies of the 20th century. (CHUM; CWRT)

PHIL 310  Symbolic Logic (3 credits)  
Prerequisite: One 100-level, three-credit course in philosophy  
This course explores the ideas and techniques of symbolic logic that are of use in understanding, developing and appraising natural deductive arguments. Offered alternate years. (CQUR)

PHIL 320  Topics in Philosophy (3 credits)  
Prerequisite: One 100-level, three-credit course in philosophy  
This course offers various topics of special interest to philosophers, including topics in the history, problems, and methods of philosophy. May be taken for credit more than once with change of topic. The course will be offered from time to time and. (CHUM; CWRT)

PHIL 402  Knowledge and Truth (3 credits)  
Prerequisite: Two courses in philosophy at or above the 200 level; or consent of instructor  
This course examines both historical and recent discussions of problems and arguments concerning knowledge, belief, skepticism, justification, objectivity, relativism and truth. Questions include: Can we have knowledge? Does knowledge entail certainty? Are there sources of knowledge that transcend the senses? Are we justified in believing that there is an external world? Is there one objective reality or many alternative realities? What is truth? Is truth relative? Offered alternate years. Note: May be taken for graduate-level credit with the consent of the department chairperson. (CHUM; CWRT)

PHIL 403  Ethics and Action (3 credits)  
Prerequisite: Two courses in philosophy at or above the 200 level; or consent of instructor  
This course examines both historical and recent discussions of problems and arguments concerning moral reasons, knowledge, character, motivation, justification, judgements, and action. Questions include: Can we have moral knowledge? If so, in what does it consist? Are moral disagreements capable of rational resolution? What does it mean to be moral? Are there morally preferable ideals, qualities of character, and ways of life? Are there moral facts or truths independent of human desires, preferences, and agreements? Note: May be taken for graduate-level credit with the consent of the department chairperson. (CHUM; CWRT)

PHIL 404  Mind and Language (3 credits)  
Prerequisite: Two courses in philosophy at or above the 200 level; or consent of instructor  
This course examines both historical and recent discussions of problems and arguments concerning mind, consciousness, emotion, personal identity, meaning, privacy, causality and behavior. Questions include: What is the mind? What is the relationship between mind and body? Can reasons, emotions, and motives cause behavior? What is consciousness? Can we have knowledge of the mental states of others? Can there be an exclusively private language for our own feelings? Will there ever be a machine that can think and feel? Do animals have minds and language? Is language innate? Note: May be taken for graduate-level credit with the consent of the department chairperson. (CHUM; CWRT)

PHIL 405  Metaphysics (3 credits)  
Prerequisite: Two courses in philosophy at or above the 200 level; or consent of instructor  
This course focuses on the study of fundamental metaphysical issues. Topics may include issues such as the nature of existence, the mind-body problem, issues in space and time, the finite vs. the infinite, personal identity and causation plus its implications for freedom. The course explores classical as well as contemporary readings. (CHUM; CWRT)

PHIL 450  Senior Seminar in Philosophy (3 credits)  
Prerequisite: Senior standing in any major and four courses in philosophy; or consent of instructor  
This course will integrate the students' previous studies in philosophy with their present work, culminating in a three-part reflective essay on their philosophical progress in the areas of history of philosophy, philosophical problems, and applications of philosophy to other
disciplines. Students and philosophy faculty will engage in discussions based on selected readings and research presentations by the faculty in various areas of philosophy. Spring semester. (CWRM)

PHIL 485 Honors Thesis (3 credits)
Prerequisite: Open to Commonwealth and Departmental Honors students; one 100-level, three-credit course in philosophy
One-hour weekly meetings with the thesis director will culminate in an honors thesis. With the consent of the Departmental Honors Committee and the thesis director, this course may be extended into a second semester for three additional credits depending upon the scope of the project. Whether the final version of the thesis qualifies the student to graduate with honors will be determined by the Departmental Honors Committee. Either semester.

PHIL 499 Directed Study in Philosophy (1-3 credits)
Prerequisite: Consent of the department; formal application required
Directed study is open to juniors and seniors who have demonstrated critical and analytical abilities in their studies and who wish to pursue a project independently. This course may be taken twice for a maximum of six credits. Offered either semester.

Philosophy: Other Approved Courses

PHIL 207 Philosophy of Education
PHIL 305 American Philosophy
PHIL 338 Honors Tutorial
PHIL 339 Honors Tutorial
PHIL 502 Research
PHIL 503 Directed Study

- PHYSICAL EDUCATION

PHED 100 Applied Musculoskeletal Anatomy (3 credits)
Includes a fundamental study of the human body and its parts, with special emphasis on bones, muscles, joints and tissues involved in basic movement patterns.

PHED 117 Historical and Philosophical Foundations of Sport, Physical Education and Exercise (3 credits)
A historical and philosophical study of sport, physical education and exercise including an overview of physical activity from Ancient Greece and Rome to the Modern Olympiad with an emphasis on 19th and 20th century sport history, sport philosophy, physical education and exercise systems.

PHED 131 Volleyball I – Beginner (1 credit)
Concepts and fundamental skills of volleyball, team play, rules and game strategy.

PHED 132 Field Hockey I (1 credit)
Development of basic skills, concepts and strategies for playing the game with understanding and application of rules.

PHED 133 Basketball I – Beginner (1 credit)
Fundamental skills of basketball, elementary offense and defense strategies.

PHED 134 Self Defense (1 credit)
This course will focus on the methods of self-defense in real world scenarios and appropriate conditioning for self-defense.

PHED 135 Freshman Honors Colloquium (1 credit)
Prerequisite: Open to Commonwealth Honors students and to others at the discretion of instructor
Freshman Honors Colloquia in physical education allow exceptionally able students to explore a challenging topic in small classes under close faculty supervision. Colloquia meet once a week for 50 minutes and culminate in a paper or scientific project, which provides the major part of the grade. The minimum enrollment is two and the maximum is 12. Topics vary from semester to semester. Fall semester.

PHED 136 Freshman Honors Colloquium (1 credit)
Prerequisite: Open to Commonwealth Honors students and to others at the discretion of instructor
Freshman Honors Colloquia in physical education allow exceptionally able students to explore a challenging topic in small classes under
close faculty supervision. Colloquia meet once a week for 50 minutes and culminate in a paper or scientific project, which provides the major part of the grade. The minimum enrollment is two and the maximum is 12. Topics vary from semester to semester. Spring semester.

**PHED 140 Lacrosse (1 credit)**
Fundamental skills, strategies, rules and knowledge for playing lacrosse.

**PHED 141 Soccer (1 credit)**
Fundamental skills of soccer including kicking techniques, trapping, heading, offensive and defensive strategy and rules of the game.

**PHED 145 Flag Football (1 credit)**
Concepts and fundamental skills of the game including rules and strategy of play.

**PHED 150 Beginner Swimming (1 credit)**
This course is for the non-swimmer or beginner swimmer (shallow water only). Emphasis is on water adjustment, primary skills, stroke readiness and stroke development comparable to American Red Cross swimming course levels I, II, III.

**PHED 152 Theory and Practice of Lifeguard Training (2 credits)**
Lifeguard duties, responsibilities, requirements, and philosophy are emphasized. Successful completion of course requirements will earn Red Cross certification in Lifeguard Training and First Aid, and in CPR for the Professional Rescuer. Additional modules in Disease Transmission Prevention and Oxygen Administration for the Professional Rescuer will be offered. One hour of lecture and two hours of laboratory periods will be conducted weekly during the entire semester.

**PHED 163 Aerobics (1 credit)**
A series of easy to learn dances that combine the health and figure benefits of jogging with the fun and vigor of dancing. It is recommended that participants should be in good physical condition and anyone over 35 years have a physical examination prior to enrolling in the class.

**PHED 169 Introduction to Adventure Activities (1 credit)**
This course is designed to introduce the student to the experiences, philosophy and leadership skills involved in selected cooperative and adventure activities. Students will participate in a variety of cooperative games, problem-solving initiatives, trust activities, and low and high challenge course activities. The Full Value Contract and Choice of Challenge philosophies will guide actions and activity selection.

**PHED 170 Bowling I – Beginner (1 credit)**
Concepts and fundamentals of bowling: approach, delivery, follow through and strategy of play.

**PHED 173 Archery I – Beginner (1 credit)**
Concepts and fundamental skills of archery including methods of aiming, scoring and introduction to novelty events.

**PHED 174 Tennis I – Beginner (1 credit)**
Concepts and fundamental skills of tennis including forehand, backhand, serve, rules and strategy of singles and doubles play.

**PHED 175 Golf I – Beginner (1 credit)**
Concepts and fundamental skills of the game including rules and scoring. A minimal fee of approximately $4 for use of facilities will be charged.

**PHED 176 Badminton I – Beginner (1 credit)**
Fundamental skills, rules and game concepts in order to prepare students for satisfying play experiences.

**PHED 178 Disc Sports (1 credit)**
This class will teach the fundamental skills, strategies and characteristics of Ultimate Disc and Disc Golf. It will prepare students to effectively develop, organize and teach the basics of these sports in various settings and levels of play.

**PHED 179 Pilates (1 credit)**
Students will study the Pilates method of "Contrology", or body conditioning, focusing on strengthening and lengthening exercises. The non-impact exercises can improve posture and enhance flexibility, balance and muscle tone, unite mind and body, and create a more streamlined physique.

**PHED 180 Coaching Basics (1 credit)**
This course provides a “Level 1” coach by the American Coaching Effectiveness Program.

**PHED 186 Track and Field (1 credit)**
Skills of track and field including running, jumping, throwing events and their progressions.

**PHED 188 Jogging and Road Running (1 credit)**  
An introduction to jogging and road running. Emphasis on knowledge and application of training technique and running mechanics, as they apply to the spectrum of running, from jogging to road racing and marathoning.

**PHED 190 Conditioning (1 credit)**  
Concepts, exercises and activities related to the development of physical fitness, including isometrics, weights and running.

**PHED 193 Weight Training (1 credit)**  
Emphasis will be on concepts and development of physical fitness through individualized weight training programs.

**PHED 194 Wrestling (1 credit)**  
Fundamentals of college wrestling with emphasis on mat skills, rules, scoring and strategy. *Offered fall semester only.*

**PHED 196 Fencing I – Beginner (1 credit)**  
Concepts and fundamental skills of fencing including defense, feints, lunges, parries, ripostes and disengages are covered in this course.

**PHED 199 First Year Seminar (3 credits)**  
Prerequisite: Open to all freshmen with a writing placement score of 3 or above or a SAT score of 500 or above or who have completed ENGL 101. Students with 24 or more transfer credits will have this requirement waived.  
First Year Seminars (FYS) are writing-intensive, topic courses that introduce students to academic thought, discourse and practices. FYS courses prepare and orient students toward productive and fulfilling college careers by actively engaging them in a specific academic area of interest. Students will improve their writing, reading, research and basic information and technology skills while learning to work both collaboratively and independently. These courses will fulfill the First Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one FYS course may be taken for credit. (CFYS)

**PHED 200 Fitness for Life (3 credits)**  
This course is concerned with aiding the student to achieve a lifetime of physical vigor, good health and sense of well-being. Its emphasis is on the biological basis, planning and implementing of an ongoing program of self-care through physical activity and proper nutrition.

**PHED 201 Fitness Testing in Exercise Science (1 credit)**  
The course is an introductory laboratory experience in the conduct of exercise and anthropometric tests utilized during the conduct of preventative and rehabilitative exercise programs. The student will conduct and practice administering testing programs.

**PHED 202 Orienteering (1 credit)**  
Development of skills in the use of maps and compass as related to the sport of orienteering is covered in this course.

**PHED 203 Basic Rock Climbing (1 credit)**  
Development of fundamental skills and techniques used in rock climbing with special attention to belaying and safety considerations.

**PHED 204 Theory and Practice of Progressive Resistance Training (2 credits)**  
Prerequisite: Open to physical education and athletic training majors or consent of instructor  
This course consists of a study of the procedures used to train people to enhance their musculoskeletal fitness through progressive resistance exercise. Specific emphasis will be placed on bodybuilding, power lifting, Olympic-style lifting, dynamic flexibility, plyometrics and agility training. One hour of lecture and two hours of laboratory periods will be conducted weekly over the entire semester.

**PHED 205 Introduction to Teaching Physical Education in the Public Schools (2 credits)**  
This course is designed to give students information about teaching physical education as a profession. Through discussion and direct observation of the teaching-learning environment, students will be able to study and observe the characteristics of learners of different age and grade levels as well as the philosophy, goals and objectives of programs for various certification levels. *Fall semester.*

**PHED 206 Theory and Practice of New Age Fitness (2 credits)**  
The course consists of the study and practice of contemporary fitness techniques as they pertain to overall health and wellness. Mind/body connections are presented and developed. The disciplines of Pilates, Gyrokinesis and Yoga will be explored through practice and examination. Specific correlations will be drawn between each discipline and strength and flexibility training, cardiovascular endurance and muscular balance. One hour of lecture and two hours of laboratory (movement) will be conducted weekly over the entire semester.

**PHED 207 Theory and Practice of Equestrianship (2 credits)**
This course provides the basics of equestrian skills and gives students the proper foundation for safe enjoyment of the equestrian sport. The course is a hands-on approach geared toward students wishing to become proficient in equestrianship, with emphasis on the equine psychology and behavior, health and stable management and riding theory.

PHED 208 Theory and Practice of Group Instruction (2 credits)
Prerequisite: Restricted to Athletic Training and Physical Education majors
This course consists of a systematic study of the procedures used to teach aerobics and group exercise. Upon completion of this course students will have the option to sit for a group exercise/aerobics certification. One-hour lecture and two hours of laboratory periods will be conducted weekly over the entire semester.

PHED 209 Theory and Practice of Metabolic Training (2 credits)
This course will provide the theory behind aerobic and anaerobic training and will provide students with sufficient activity to produce a training effect in the various metabolic systems. One hour of lecture and two hours of laboratory will be conducted weekly over the entire semester.

PHED 210 Developmental Kinesiology (3 credits)
Prerequisite: PHED 100
This course uses a developmental approach to introduce the student to fundamental motor patterns. The anthropometrics and basic biomechanics that affect each motor pattern, are highlighted. Emphasis is placed on typical development as presented throughout the lifespan.

PHED 212 Strategies and Analysis of Motor Skills (3 credits)
Prerequisite: PHED 205 which may be taken concurrently
This course is an introduction to the learning and development of motor skills and movement principles. Fundamental assessment and evaluation concepts and procedures will be studied and applied. Offered spring semester.

PHED 217 Principles of Motor Learning and Performance (3 credits)
This course introduces the student to the concepts and principles related to practice, performance and the learning of movement skills.

PHED 221 Equestrianship I (1 credit)
The course provides the basics of equestrian skills and the proper foundation for safe enjoyment of equestrian sport. The course will provide basic equestrianship and riding skills, including equine psychology and behavior, anatomy and physiology, equine health and disease, stable management and riding theory. Students will participate in limited mounted riding lessons and will learn proper riding techniques. Particular emphasis will be given to safety as students learn and practice basic horse handling skills on the ground and when mounted.

PHED 222 Equestrianship II (1 credit)
Prerequisite: PHED 221 or consent of instructor
The course is a continuation of PHED 221. The class provides the basics of equestrian skills and the proper foundation for safe enjoyment of equestrian sport. The course will provide basic equestrianship and riding skills, including equine psychology and behavior, anatomy and physiology, equine health and disease, stable management and riding theory. Students will participate in limited mounted riding lessons and will learn proper riding techniques. Particular emphasis will be given to safety as students learn and practice basic horse handling skills on the ground and when mounted.

PHED 225 Observation and Analysis of Movement for Children (4 credits)
Prerequisite: PHED 205 which may be taken concurrently
An introduction to the movement approach to games, dance, and gymnastics with emphasis on program content and progression using the thematic approach. Spring semester.

PHED 229 Practicum in Sport Management (2 credits)
Prerequisite: PHED 239 or consent of instructor
This practicum gives students experience in the practical aspects of planning, conducting and evaluating sports programs. The students will work in approved recreation and intramural programs at Bridgewater State University. The practicum is supplemented by seminars related to the students' professional development.

PHED 231 Volleyball II – Intermediate (1 credit)
Prerequisite: PHED 131 or comparable experience
A follow-up of Volleyball I with emphasis on increased proficiency of performance and game strategy.

PHED 233 Basketball II – Intermediate (1 credit)
Prerequisite: PHED 133 or comparable experience
This course is a follow-up to Basketball I with emphasis on advanced strategy and game play.

PHED 234 Yoga (1 credit)
This class will introduce students to the ancient discipline of Hatha Yoga. Even though Hatha Yoga has been practiced for thousands of years, we in the West are just becoming aware of its many health benefits. In this class we will discuss the history of Yoga, the Eight Limbs of Classical Yoga, the different Paths of Yoga, the Energetic Systems of Yoga, the Asana and Pranayama of Yoga and Meditation. An emphasis will be placed on the physical practice of Yoga allowing the students to experience its many benefits.

PHED 239 Introduction to Sport Management (3 credits)
Prerequisite: First Year Seminar 199 or consent of instructor
This course will serve as an introduction to the profession of sports management. Students will explore current issues in sport management, the history of the profession and avenues for professional preparation. Students will gain an understanding of the historical evolution of professional sport management practice. Students will become familiar with current issues in the business of sport.

PHED 244 Softball (1 credit)
Concepts and fundamental skills of the games including rules and strategy of play are covered. Spring semester.

PHED 250 Intermediate Swimming (1 credit)
This course is for the deep-water swimmer and provides continued development on more advanced swimming skills, strokes, diving and survival techniques.

PHED 252 Water Safety Instructor (3 credits)
Prerequisite: Red Cross Level VI of the Learn to Swim program or comparable skill level of proficiency as determined by a pre-course swimming and written screening test
Instruction in pedagogy and methodology for teaching Red Cross progressive swimming classes and Community Water Safety. Successful completion of course requirements will earn Red Cross Certification in Instructor Candidate Training and Water Safety Instructor.

PHED 254 Water Polo (1 credit)
Includes basic movements, skills and maneuvers of the sport of water polo with emphasis on offensive and defensive fundamentals and strategies, practical drills, rules and regulations.

PHED 257 Movement and Relaxation – Theory, Practice and Performance (1 credit)
This course will introduce students to the theory, practice and performance of yoga, relaxation procedures and basic movements related to daily activities.

PHED 269 Theory and Practice of Adventure Programs (2 credits)
This course provides participants with a model for planning and developing integrated adventure education programs that emphasize the development of physical, intellectual and social skills in a safe, supportive and challenging environment. Particular emphasis is placed on the current models of experiential education. The standards of the Association for Challenge Course Technology (ACCT) will be utilized and practiced. Students will study, reflect on and use the experiential learning model and basic facilitation strategies. The use of low and high challenge course elements will provide a laboratory for practice, exploration and discovery. A two-hour lecture and one-hour laboratory will be conducted weekly over the entire semester.

PHED 274 Tennis II – Intermediate (1 credit)
Prerequisite: PHED 174 or comparable experience
A follow-up of Tennis I with emphasis on volley, lob, smash and game strategy.

PHED 276 Badminton II – Intermediate (1 credit)
Prerequisite: PHED 176 or comparable experience
A follow-up of Badminton I with emphasis on advanced skills, singles and doubles play, and game strategy.

PHED 278 Bicycle Touring (1 credit)
An understanding and appreciation for the sport of cycling through the application of body mechanics, cycling techniques, knowledge of multigeard bikes and the many aspects of touring. Students must have a bike.

PHED 280 Initiative Games (1 credit)
This course is designed to introduce a variety of non-competitive, team building activities and games suitable for multiple age groups. The students will experience the psychomotor, cognitive and affective components embodied in these "initiative" games.

PHED 282 Theory and Practice of Games (2 credits)
This course is an introduction to games with emphasis on analysis across the games classification (net/wall, invasion, target, striking/fielding games). Game playing experiences will focus on content development for all learners.

**PHED 283 Theory and Practice of Gymnastics (2 credits)**
This course will introduce students to the theory and practice of gymnastics, with an emphasis on developmentally appropriate practices. Gymnastics experiences will focus on content development for all learners.

**PHED 284 Foundations of Sport and Exercise Nutrition (3 credits)**
This course serves as an introduction to the field of sport nutrition, which includes the study of carbohydrates, fats, proteins and other essential nutrients. Students gain knowledge of digestion, absorption and metabolism. Nutritional guidelines and dietary analysis of the physically active individual will be emphasized. Alternate semesters.

**PHED 286 Sophomore Honors Colloquium (1 credit)**
Prerequisite: Open to Commonwealth Honors students and to others at the discretion of instructor
Sophomore Honors Colloquia in physical education allow exceptionally able students to explore a challenging topic in small classes under close faculty supervision. Colloquia meet once a week for 50 minutes and culminate in a paper or scientific project, which provides the major part of the grade. The minimum enrollment is two and the maximum is 12. Topics vary from semester to semester. Fall semester.

**PHED 287 Sophomore Honors Colloquium (1 credit)**
Prerequisite: Open to Commonwealth Honors students and to others at the discretion of instructor
Sophomore Honors Colloquia in physical education allow exceptionally able students to explore a challenging topic in small classes under close faculty supervision. Colloquia meet once a week for 50 minutes and culminate in a paper or scientific project, which provides the major part of the grade. The minimum enrollment is two and the maximum is 12. Topics vary from semester to semester. Spring semester.

**PHED 298 Second Year Seminar (Speaking Intensive) (3 credits)**
Prerequisite: PHED 199; Open to all sophomores and juniors who have completed ENGL 101, and the speaking skills requirement. Students with 54 or more transfer credits will have this requirement waived. Cannot be taken if _____ 299 is taken for credit.
Second Year Seminars (SYS) are speaking-intensive, topic courses that build on the academic skills and habits introduced in the First Year Seminar. SYS courses engage students in a specific academic area of interest and provide them with the opportunity to reinforce, share and interpret knowledge. Students will improve their speaking, reading, research and basic information and technology skills while building the connections between scholarship and action that are required for lifelong learning. These courses will fulfill the Second Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one SYS course may be taken for credit. (CSYS)

**PHED 299 Second Year Seminar (Writing Intensive) (3 credits)**
Prerequisite: PHED 199; Open to all sophomores and juniors who have completed ENGL 101 and ENGL 102. Students with 54 or more transfer credits will have this requirement waived. Cannot be taken if _____ 298 is taken for credit.
Second Year Seminars (SYS) are writing-intensive, topic courses that build on the academic skills and habits introduced in the First Year Seminar.SYS courses engage students in a specific academic area of interest and provide them with the opportunity to reinforce, share and interpret knowledge. Students will improve their writing, reading, research and basic information and technology skills while building the connections between scholarship and action that are required for lifelong learning. These courses will fulfill the Second Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one SYS course may be taken for credit. (CSYS)

**PHED 315 Teaching Team and Individual Sports (4 credits)**
Prerequisite: PHED 205 and PHED 212; and PHED 282 which may be taken concurrently; and admission to the Professional Education Program
Methodologies, teaching strategies, materials and media for introducing, developing and evaluating skills and knowledge of selected team and individual sports. Fall semester.

**PHED 318 Socio-Cultural Foundations of Sport and Physical Activity (3 credits)**
Prerequisite: ENGL 101 and ENGL 102
This course provides an introduction to the study of sport and physical activity as social institutions and elements of culture. Major topics include the roles of sport and physical activity in society, the relationship of sport, physical activity and other social institutions and variations in sport across cultures. (CWRM)

**PHED 324 Physical and Motor Development of Individuals with Disabilities (3 credits)**
This course addresses medical, psychological and educational issues of individuals with disabilities. The course also reviews concepts related to sensory development, physical fitness, perceptual-motor development, fundamental motor and sport skill development as well as strategies related to cooperative and competitive social interaction. Topics presented will include the study of individuals with visual
impairments, blindness, hard-of-hearing conditions, deafness, intellectual disabilities, cerebral palsy, spina bifida and postural disorders. Moreover, the diagnostic-prescriptive process will be stressed along with screening and assessment instruments and techniques. The course includes clinical observation and laboratory experiences.

PHED 325 Methods and Techniques in Coaching Individual Sports (1 credit)
A brief theoretical study of individual sports, offensive and defensive fundamentals and strategies and responsibilities regarding administration of practice and performance.

PHED 326 Teaching Physical Education to Children (3 credits)
Prerequisite: PHED 205 and PHED 225 and admission to the Professional Education Program
A study of the movement approach to teaching physical education to children with emphasis on developing content and methodology. Students will engage in pre-practicum experience with children in an on-campus setting focusing on developing, analyzing and improving teaching behavior and developing teaching materials. Fall semester.

PHED 329 Teaching and Curriculum Development in the Middle and Junior High School (3 credits)
Prerequisite: PHED 205; and PHED 212 or PHED 225; and admission to the Professional Education Program
This course will focus on teaching and curriculum development for physical education in the middle and junior high school. Emphasis will be placed on important trends in our society and an understanding of what physical education can and should mean to the education of transadolescents. Teaching concepts as well as equity issues, comprehensive curriculum planning and evaluation will be studied. Fall semester.

PHED 335 Planning, Implementation, and Evaluation in Teaching Physical Education (6 credits)
Prerequisite: PHED 205; and PHED 210 which may be taken concurrently; and PHED 212 or PHED 225 or PHED 281 or PHED 282 or PHED 283; and PHED 315 or PHED 326; and PHED 329; and admission to the Professional Education Program
Designed to develop teaching competencies related to the planning, implementation and evaluation aspects of instructional programs in physical education. Course will include current research on effective teaching, peer teaching and videotape analysis of teacher and student behavior. Spring semester. (Formerly PHED 313)

PHED 356 Canoeing I (1 credit)
Instruction in fundamental skills of canoeing and small craft safety techniques.

PHED 360 Initiative Games II (1 credit)
Prerequisite: PHED 280, which may be taken concurrently; or consent of instructor
This course is designed to expand on the philosophy of PHED 280 Initiative Games and experiential learning. Students will participate in a variety of cooperative, advanced team building activities and develop leadership skills for such activities. The focus of the class will be on the learning and application process associated with intentional and constructive game play.

PHED 365 Women in Sports (3 credits)
Cross Listed with WMST 365
Prerequisite: Three core curriculum requirement credits in behavioral science
This course investigates the sport-women relationship from a physiological, historical and sociocultural perspective. In doing so, it examines images, attitudes and structures that affect the involvement of women in sport and exercise and restrict/enhance their personal and professional potential.

PHED 366 Planning, Implementing and Evaluating Sport Management (3 credits)
Prerequisite: PHED 239 or consent of instructor
This course provides students with skills needed to plan, implement and evaluate programs in sport and recreation settings as varied as elementary schools, community centers or university campuses. Emphasis will be placed on program development and the professional development and the professional and administrative duties of an entry-level sport management professional in positions such as intramural director, facility manager and recreation agency coordinator.

PHED 380 The Psychology of Sport and Physical Performance (3 credits)
This course is an overview of how psychological factors affect sport and physical performance.

PHED 384 Applied Nutrition for Sport and Exercise (3 credits)
Prerequisite: PHED 284 or consent of instructor
The concepts covered in PHED 284 are explored in greater depth by means of a variety of activities including food experiments, anthropometric measurement, body composition analysis using case studies of the physically active. Laboratory experiences will be included.

PHED 385 Biomechanics (4 credits)
This course introduces the student to the concepts and principles of biomechanics as they relate to sport and recreational skills. Three hours of lecture and one two-hour laboratory weekly.

**PHED 397  Children's Physical Developmental Practicum (2 credits)**
*Prerequisite: Consent of instructor*

The course affords students serving as clinicians in the Children’s Developmental Clinic the challenging opportunity to assess a child’s development level and design an individual activity program to ameliorate psychomotor and social deficiencies. More specifically, students will learn strategies for teaching children with disabilities, techniques for developing terminal goals and behavioral objectives, and methods for writing anecdotal records as well as writing and orally presenting a clinical report that summarizes a child's progress over the course of a semester. This course is open to all majors and may be repeated with consent of the instructor. Graded on a (P) Pass/(N) No Pass basis.

**PHED 400  Physiology and Techniques of Strength Fitness (3 credits)**
*Prerequisite: PHED 204, taken previously or concurrently*

To provide students with a knowledge of the effects of heavy-resistance exercise training protocols on musculoskeletal integrity, metabolic capacity and various specific tissue characteristics in the human body. Thus, the course necessarily considers microanatomical and physiological variations associated with general strength conditioning programs, body building, Olympic lifting, power lifting, circuit training, variable resistance, isotonic, isokinetic and isometric resistance training. May be taken for graduate-level credit.

**PHED 401  Physiology of Exercise (4 credits)**

This course includes the study of systems, their interrelationships and adjustments during exercise and as a result of training. Emphasis is on current research findings and what remains to be discovered in a human as a moving being. Three hours of lecture and one two-hour laboratory period weekly. May be taken for graduate-level credit.

**PHED 402  Exercise Metabolism (3 credits)**
*Prerequisite: PHED 401 or equivalent*

An in-depth study of human physiological principles as applied to exercise, sport activity and research. Special emphasis is on neurological control, exercise in relation to cardiovascular disease, and factors affecting performance. May be taken for graduate-level credit.

**PHED 403  Cardiovascular Analysis, Evaluation, and Rehabilitation (3 credits)**
*Prerequisite: PHED 401 or equivalent*

This course includes an examination of cardiovascular dynamics as studied through anatomy, electrophysiology, rehabilitation, and the pathology of the cardiovascular system. Specific emphases will be placed on the analysis of the cardiovascular system through the ECG, cardiac rehabilitation, and basic cardiac pharmacology. Fall semester. May be taken for graduate-level credit.

**PHED 404  Exercise Prescription (3 credits)**

This course focuses on the development of individual prescriptive exercise programming with respect to individual contraindications. Environmental conditions along with intensity, duration and frequency of physical activity will be studied in order to develop programs. Summer sessions. May be taken for graduate-level credit.

**PHED 405  Exercise Circulation: Mechanisms and Morphology (3 credits)**
*Prerequisite: PHED 401*

This course provides students with a knowledge and understanding of the acute and chronic effects of exercise on the peripheral and central circulatory systems. It deals with exercise-related cardiovascular dynamics, effects of frequently used medications and growth responses induced by regular exercise as well as abnormal physiological responses to exercise. May be taken for graduate-level credit.

**PHED 406  Personal Fitness Training (3 credits)**
*Prerequisite: PHED 401; Athletic Training and Physical Education majors only*

This course will teach the exercise science student to train sedentary adults, as well as adults within special health populations. The aspects of developing safe, profitable, and legal personal training practices will be explored. Students will have the opportunity to train a client and will have the opportunity to sit for a National Advanced Personal Training Certification. May be taken for graduate-level credit.

**PHED 409  Planning, Implementing and Evaluating Fitness Programs (3 credits)**

This course provides students with skills needed to develop, implement and evaluate programs in fitness and rehabilitative exercise centers. Emphasis will be placed on program development, on providing instruction to individuals and groups and on administrative tasks expected of the entry-level fitness professional. May be taken for graduate-level credit.

**PHED 414  Coaching (3 credits)**
The application of teaching and learning principles as related to the player, team, coach and the athletic program. Areas to be included will be psychology and philosophy of coaching, organization and administration of the program, coaching techniques, conditioning and evaluative procedures. Offered once a year.

**PHED 416 Planning and Implementing Coaching Leadership Strategies (3 credits)**  
*Prerequisite: PHED 217 and PHED 414*  
Designed to enhance leadership and instructional competencies in the coaching profession, this course will stress the principles and practices of effective coaching including peer feedback, analysis of coach (role-playing) and athlete (peer) behavior, and utilization of motivational techniques to enhance skill development. Offered once a year.

**PHED 420 Advanced Philosophy and Principles of Sports Management (3 credits)**  
*Prerequisite: PHED 239 and PHED 366; or consent of instructor*  
This course will address the philosophy and principles of the profession of sport management. Professional ethics, legal issues and the philosophies of management models will be considered. Students will gain an understanding of the importance of philosophic inquiry to the study of physical activity. Students will be challenged to develop their own philosophy of professional practice.

**PHED 451 Prosthetics and Orthotics (3 credits)**  
This course presents principles and techniques of using prosthetics, orthotics and wheelchairs for mobility, motor skill development, leisure activity and sport. Emphasis will include equipment adaptations and program planning for individuals with neuromuscular disease, spinal cord injuries and amputations. The course includes clinical observation and laboratory experiences. Spring semester. May be taken for graduate-level credit.

**PHED 474 Sports Nutrition and Performance Enhancing Supplements (3 credits)**  
This course will explore the issues associated with nutritional and performance-enhancing supplements.

**PHED 481 Organization and Administration of Athletics (3 credits)**  
Course content will include the history of sport management; athletics policies and regulations on the local, state and national levels; administrative plans; contest management; marketing strategies; legal principles; sport ethics; media relations; sport broadcasting; finance and budget; athletic facilities; scheduling; public relations; intramural and recreational sports; trends in scholastic, collegiate, international and professional sport; and growth in the health and fitness industry.

**PHED 484 Physical Education for Children and Youth with Disabilities (3 credits)**  
The planning and development of physical education programs considered appropriate to the needs, interests and abilities of exceptional children and youth. Emphasis will be placed on the contribution that physical education can make to the education and well-being of the physically, mentally and emotionally handicapped. May be taken for graduate-level credit.

**PHED 485 Honors Thesis (3 credits)**  
*Prerequisite: Open to Commonwealth and Departmental Honors students*  
One-hour weekly meetings with the thesis director will culminate in an honors thesis. With the consent of the Departmental Honors Committee and the thesis director, this course may be extended into a second semester for three additional credits depending upon the scope of the project. Whether the final version of the thesis qualifies the student to graduate with honors will be determined by the Departmental Honors Committee. Either semester.

**PHED 491 Field-Based Pre-Practicum (5-12) – Physical Education (2 credits)**  
*Prerequisite: PHED 315 and PHED 326; and PHED 335 which may be taken concurrently*  
This course is designed to provide the student with field-based teaching experiences in selected settings. One quarter, either semester or Summer I.

**PHED 492 Practicum in Student Teaching (5-12) – Physical Education (12 credits)**  
*Prerequisite: PHED 491 and PHED 100 and PHED 117 and PHED 217 and PHED 318 and PHED 385 and HEAL 102; and BIOL 100 or BIOL 102; and PSYC 227; and acceptance into student teaching*  
The practicum is full-time teaching for one semester with supervision provided by members of the department faculty.

**PHED 494 Study of Motor Programs for Individuals with Chronic and Acute Health Impairments (3 credits)**  
*Prerequisite: PHED 324*  
Included in this course is a study of chronic and acute health problems that interfere with work productivity, leisure activity and life satisfaction. The course will survey a number of conditions including overweight and obesity, diabetes, arthritis, dwarfism, muscular dystrophies, multiple sclerosis, hemophilia, asthma and cancer. Adapted physical activity strategies will include development of appropriate goals and objectives and program planning to improve self-confidence and to enhance a leisure lifestyle. Fall semester. May be taken for graduate-level credit.
PHED 495  Field-Based Pre-Practicum (PreK-8) – Physical Education (2 credits)
Prerequisite: PHED 315 and PHED 326; and PHED 335 which may be taken concurrently
This pre-practicum is designed to provide the student with field-based teaching experiences in selected settings. One quarter, either semester.

PHED 496  Practicum in Student Teaching (PreK-8) – Physical Education (12 credits)
Prerequisite: PHED 495 and PHED 100 and PHED 117 and PHED 217 and PHED 318 and PHED 385 and HEAL 102; and BIOL 101 or BIOL 102; and PSYC 227; and acceptance into the Professional Education Program
The practicum is full-time teaching for one semester with supervision provided by members of the department faculty.

PHED 497  Practicum in the Children's Physical Developmental Clinic (3 credits)
Prerequisite: A minimum of one year's experience in the Children's Physical Developmental Clinic and consent of instructor
The Children’s Physical Developmental Clinic (CPDC) is an interdisciplinary community service program designed to enhance the physical, motor and social development of children with disabilities, 18 months through 18 years. This course provides veteran student clinicians a practical experience in assessing program development, administration and evaluation of the CPDC as well as the training and supervision of less-experienced clinicians. The course is open to all majors and may be repeated once for credit with the consent of the instructor. May be taken for graduate-level credit.

PHED 498  Field Experience in Physical Education (3-15 credits)
Prerequisite: Consent of the department; formal application required
A field experience offers qualified students the opportunity to gain practical experience in their major. Placements are made in both public and private agencies and are designed to complement a student's concentration in his/her major. This course may be repeated for a maximum of 15 credits.

PHED 499  Directed Study in Physical Education (1-3 credits)
Prerequisite: Consent of the department; formal application required
Directed study is open to all juniors and seniors who have demonstrated critical and analytical abilities in their studies and who wish to pursue a project independently. This course may be taken twice for a maximum of six credits.

PHED 501  Physical Education Project (3 credits)
Prerequisite: Matriculation in the MS in Physical Education and consent of department; formal application required
Students will plan and implement a physical education research or practice-based project. The project will culminate with an oral defense to the project committee. Topics must be relevant to the student's program of study, have the potential to make a positive contribution to the physical education discipline or facilitate the development or improvement of a program.

PHED 502  Research (3 or 6 credits)
Prerequisite: Consent of the department; formal application required
Original research undertaken by the graduate student in their field. For details, consult the paragraph titled “Directed or Independent Study” in the “College of Graduate Studies” section of this catalog. This course may be repeated for a maximum of six credits.

PHED 503  Directed Study (1-3 credits)
Prerequisite: Consent of the department; formal application required
Directed study is designed for the graduate student who desires to study selected topics in a specific field. For details, consult the paragraph titled “Directed or Independent Study” in the “College of Graduate Studies” section of this catalog. This course may be repeated for a maximum of six credits.

PHED 504  Nutrition for Sports, Exercise and Weight Control (3 credits)
This course will provide a thorough review of nutritional principles and practices essential for exercise and optimal performance in sports. Also stressed are principles and strategies for maintaining, gaining or losing weight.

PHED 506  Philosophy and Principles of Physical Education (3 credits)
Prerequisite: Six credits in physical education
Philosophical inquiry into the discipline of physical education including a study of trends and forces in education as they affect the field.

PHED 507  Children and Their Movement Behaviors (3 credits)
Prerequisite: 12 credits in physical education or consent of instructor
Current concepts and trends related to movement experiences of children with emphasis on developmental movement, and learning.

PHED 508  Motor Learning (3 credits)
Prerequisite: three credits in psychology
Integration of biological and psychological concepts in the acquisition of motor skills including environmental conditions, developmental factors and learning theories.

PHED 511 Research Methods in Physical Education (3 credits)
Cross Listed with ATTR 511
This course will develop competencies needed to both produce and consume research in physical education and allied areas. In the development of a research proposal, students will gain an understanding of such research techniques as problem formulation, literature review, sampling, hypothesis construction, research design, instrumentation and data analysis. Fall semester only.

PHED 513 Educational Games for Elementary and Middle School Level (3 credits)
A comprehensive study of the movement approach to educational games with emphasis on analysis of games. Progression utilizing thematic approach and curriculum development will also be presented.

PHED 514 Improving Teaching Effectiveness in Physical Education (3 credits)
Prerequisite: PHED 335 or equivalent
The course will focus on research pertaining to teacher and school effectiveness and implications for teaching physical education. Formats through which teachers can gather data for use in self-analysis and improvement of instruction will be examined. Equity issues and the need of a multicultural society will also be discussed.

PHED 515 Advances in Exercise Circulation (3 credits)
Prerequisite: PHED 401
This course provides students with a knowledge and understanding of current theories explaining the responses of the circulation to acute and chronic exercise. It considers translocations of fluids and fluid constituents within the vascular systems and among various body compartments. It also considers potential growth responses and abnormal responses. Alternate years.

PHED 516 Exercise Electrocardiography (3 credits)
This course focuses on the basic electrophysiology of the heart and the intricate electrical responses of the hearts of healthy and unhealthy individuals to exercise. Its fundamental emphases are thus exact descriptions of ECG variations, mechanisms underlying these variations and factors influencing cardiac electrophysiology.

PHED 517 Experimental Processes in Physical Education (3 credits)
This course will develop quantitative competencies required to conduct and understand experimental research typically occurring in physical education. It thus concerns basic measurement theory, probability, description and inference. Alternate years.

PHED 518 Advances in Exercise Metabolism (3 credits)
Prerequisite: PHED 401 or consent of instructor
Students will study advanced topics concerned with bioenergetics during exercise. It will focus on acute and chronic responses to exercise from various perspectives. Among topics covered will be cardiovascular/ventilatory coupling, chemomechanical coupling, anaerobic threshold, substrate utilization, electrolyte imbalance, oxygen use and hormonal controls of metabolisms. Alternate years.

PHED 519 Advances in Exercise Prescription (3 credits)
Prerequisite: PHED 401 or consent of instructor
This course is concerned with special circumstances, which dictate that one must adjust either the exercise testing or prescription for an individual. It is thus focused on descriptions of special situations, testing and prescription for those situations. Other special cases considered will be gender, children, aging, environment, arthritis, diabetes, obesity, heart disease, low fitness, high fitness, respiratory disorders and hypertension. Summer only.

PHED 520 Health Fitness Program Planning and Management (3 credits)
Prerequisite: At least one course in exercise physiology or consent of instructor
Designed to address strategies essential to the development of successful exercise and health fitness programs. Emphasis will be placed on program development, motivational techniques and administrative considerations.

PHED 523 Strength and Conditioning Laboratory (3 credits)
Prerequisite: PHED 204 and PHED 400 and PHED 401; or consent of instructor
This course consists of a study in the procedures used to train and coach athletes to enhance their musculoskeletal fitness through strength and conditioning. Specific emphasis will be placed on power lifting, Olympic-style lifting, dynamic flexibility, plyometrics, agility training, and sports specific training. Lecture, laboratory and out-of-class observation and field work time will be conducted weekly over the entire semester. Spring semester.
PHED 526  Sport Law (3 credits)
This course will give the sports professional an understanding of the legal system as a whole and the unique legal problems and responsibility faced in managing a sports activity. The sports professional will be educated to identify potential legal liability, to avoid unnecessary legal risks and to minimize legal loss exposure.

PHED 530  The Motor Domain: Implications for Chronic Disabilities (3 credits)
Prerequisite: PHED 324 or equivalent
An in-depth study of etiologies, classifications and functional motor abilities of chronic medical conditions will be presented. Topics will include asthma, cystic fibrosis, epilepsy, cancer, obesity, diabetes, arthritis, multiple sclerosis and muscular dystrophy. The course will also emphasize unique physiological, psychological and biochemical characteristics pertaining to motor development, sport and leisure.

PHED 531  Motor Performance Adaptations for Moderate and Severe Disabilities (3 credits)
This course addresses the etiologies, prevalence, characteristics and functional motor abilities of moderate and severe disabilities. Attention is given to an overview of moderate and severe populations, spinal cord injured and amputees. The course will also address such related topics as bloodbom pathogens, screening and assessment methods, related professional services, leisure placement strategies, due process, advocacy and legal considerations.

PHED 533  Applications of Exercise Physiology (3 credits)
Emphasis will be placed on the strategies utilized to develop physiological capacities, underlying motor skills, as well as the physiological variations induced by these stimuli. The course will necessarily concern cardiovascular endurance, strength, muscular endurance, flexibility and body composition from the perspective of physiology.

PHED 543  Foundations of Resistance Training (3 credits)
This course will provide students with knowledge of the effects of various heavy resistance training protocols on musculoskeletal integrity, metabolic capacity and various specific tissue characteristics in the human body. Thus, the course necessarily considers micro-anatomical and physiological variations associated with general strength-conditioning programs, body building, Olympic lifting, power lifting, circuit training, isotonic and isometric resistance training.

PHED 544  Applied Laboratory Techniques in Exercise Science (3 credits)
Students will utilize a number of laboratory techniques to assess fitness capabilities and health status of normal subjects. Focus will be on standardization of procedures and collection of reliable and valid data. An additional concern will be clear representation and interpretation of classical techniques used to routinely assess physical fitness in the laboratory. Summer only.

PHED 545  Physical Conditioning and Training in Sports and Exercise (3 credits)
Prerequisite: An introductory course in exercise physiology or consent of instructor
This course is designed to provide the sport practitioner, e.g., the coach, athlete, team trainer, and physical educator, with a basic understanding of the physiologic principles underlying the physical conditioning process. Methods of planning, implementing and evaluating training programs will be the main focus of attention.

PHED 546  Applied Biomechanics and Movement Analysis (3 credits)
Cross Listed with ATTR 548
This course provides students with a knowledge and understanding of the mechanical concepts underlying performance of motor skills. Focus is on analytic techniques, which allow students to analyze skills and effectively consume complex skill analyses conducted by others. Fall semester, alternate years.

PHED 551  USA Weightlifting Certification - Sport Performance Coach (1 credit)
Prerequisite: Consent of instructor and current CPR Certification
This course is designed to provide the strength and conditioning student/coach with the opportunity to test for an entry level USA Weightlifting Certification. Students will learn the progressions of the Olympic Lifts, the associate accessory lifts, and the training mechanics in order to apply for certification I as a Sport Performance Coach. Offered summer session.

PHED 552  USA Weightlifting Certification - Club Coach (1 credit)
Prerequisite: Consent of instructor and current CPR Certification
This course is designed to provide the strength and conditioning student/coach with the opportunity to test for an entry level USA Weightlifting Certification. Students will learn the progressions of the Olympic Lifts, the associate accessory lifts, and the training mechanics in order to apply for certification I as a Club Coach. Offered summer session.

PHED 553  USA Weightlifting Certification - Local Referee (1 credit)
**PHED 560  Adventure-Based Physical Education (3 credits)**  
*Prerequisite: Matriculation in the MS in Physical Education program or consent of instructor*
This course is designed for those who are new to adventure education and who work in a setting where the group process and debriefing are important. Some of the techniques to enhance group process are the following: goal setting, reflection, decision making and debriefing. The curriculum will include adventure basics, philosophy and theory, including challenge by choice and the full-value contract, ground activities, low elements and high elements. Participants should be in relatively good health and able to perform moderate physical activity.

**PHED 571  Social Issues in Sport (3 credits)**
This course will focus on advanced sociological study of sport and physical activity. Students will consider timely issues in sport from a sociological perspective and consider how these issues affect professionals working in sport and physical activity.

**PHED 581  Selected Topics in Physical Education (1-3 credits)**  
*Prerequisite: Course prerequisite may be specified depending on the nature of the topic*
Special topics of current relevance in physical education will be offered from time to time. The topic to be addressed will be announced in pre-registration publications. May take more than once with consent of adviser.

**PHED 595  Internship in Physical Education (3-6 credits)**  
*Prerequisite: 12 graduate credits in physical education and consent of adviser*
An internship offers qualified students the opportunity to gain substantial practical experience within their major. Placements are designed to complement a student's program concentration.

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**PHYSICS**

**PHYS 100  Physics in the Natural World (4 credits)**
This course considers the key scientific concepts underlying physics and how they relate to the environment. Among the topics to be considered are mechanics, heat, electricity, magnetism, optics and sound, modern physics and an historical overview of the physical sciences. This course is suitable for majors other than those in the Physical and Biological Sciences seeking basic knowledge of physics. Three hours of lecture and one two-hour laboratory period weekly. *Spring semester.* (CNSL; CQUR)

**PHYS 102  Modern Physics for the Humanist (3 credits)**
The principal theme of this course is 20th-century attempts to understand the basic laws of nature and their relationship to us. Among the topics to be considered are classical physics, the theory of relativity, atomic structure and quantum theory along with their implications for philosophy and technology. *Either semester.* (CNSN; CQUR)

**PHYS 107  Exploring the Universe (4 credits)**
This course will explore the sun, stars, their life cycles, and the galaxies. Theories of the composition and origin of the solar system, the universe and life will be studied. Students observe celestial objects including the moon, sun, planets star, nebulae, and galaxies using the university's observatory. Three hours of lecture, one two-hour laboratory and several viewing sessions. Fall semester. (CNSL; CQUR)

**PHYS 135 Freshman Honors Colloquium (1 credit)**
*Prerequisite: Open to Commonwealth Honors students and to others at the discretion of instructor*
Freshman Honors Colloquia in physics allow exceptionally able students to explore a challenging topic in small classes under close faculty supervision. Colloquia meet once a week for 50 minutes and culminate in a paper or scientific project, which provides the major part of the grade. The minimum enrollment is two and the maximum is 12. Topics vary from semester to semester. Offered fall semester.

**PHYS 136 Freshman Honors Colloquium (1 credit)**
*Prerequisite: Open to Commonwealth Honors students and to others at the discretion of instructor*
Freshman Honors Colloquia in physics allow exceptionally able students to explore a challenging topic in small classes under close faculty supervision. Colloquia meet once a week for 50 minutes and culminate in a paper or scientific project, which provides the major part of the grade. The minimum enrollment is two and the maximum is 12. Topics vary from semester to semester. Offered spring semester.

**PHYS 180 Energy and its Social Uses (3 credits)**
The basic physical laws of energy are presented. Environmental consequences of solar, fossil, hydro and nuclear energy generation are analyzed. Either semester. (CNSN; CQUR)

**PHYS 181 Elements of Physics I (4 credits)**
The language and methods of physics as illustrated in mechanics, heat and sound are studied. Applications of fundamental principles of physics to all branches of physical science are examined. Three hours of lecture and one two-hour laboratory period weekly. Fall semester. (CNSL; CQUR)

**PHYS 182 Elements of Physics II (4 credits)**
*Prerequisite: PHYS 181*
Principles of electricity, magnetism, optics and modern physics are studied. Three hours of lecture and one two-hour laboratory period weekly. Spring semester. (CNSL; CQUR)

**PHYS 183 Aviation Physics (4 credits)**
*Prerequisite: PHYS 181*
Principles of physics will be applied to topics in aviation science. This course will use the fundamental physics principles taught in Elements of Physics I (PHYS 181) and apply them to aviation science. The course will also apply topics introduced in a traditional second semester course such as heat, electronics and electricity to the field of aviation. Furthermore, the course will cover aerodynamics in depth. Three hours of lecture and one two-hour laboratory weekly. (CNSL; CQUR)

**PHYS 199 First Year Seminar (3 credits)**
*Prerequisite: Open to all freshmen with a writing placement score of 3 or above or a SAT score of 500 or above. Students with 24 or more transfer credits will have this requirement waived.*
First Year Seminars (FYS) are writing-intensive, topic courses that introduce students to academic thought, discourse and practices. FYS courses prepare and orient students toward productive and fulfilling college careers by actively engaging them in a specific academic area of interest. Students will improve their writing, reading, research and basic information and technology skills while learning to work both collaboratively and independently. These courses will fulfill the First Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one FYS course may be taken for credit. (CFYS)

**PHYS 243 General Physics I (4 credits)**
*Prerequisite: MATH 151 or equivalent*
This is a calculus-based beginning course in physics that emphasizes the study of kinematics, dynamics and heat. Three hours of lecture and one three-hour laboratory weekly. Either semester. (CNSL; CQUR)

**PHYS 244 General Physics II (4 credits)**
*Prerequisite: PHYS 243*
This course is a calculus-based study of electricity, magnetism and light. Three hours of lecture and one three-hour laboratory period weekly. Either semester. (CNSL; CQUR)

**PHYS 286 Sophomore Honors Colloquium (1 credit)**
*Prerequisite: Open to Commonwealth Honors students and to others at the discretion of instructor*
Sophomore Honors Colloquium in physics allow exceptionally able students to explore a challenging topic in small classes under close
faculty supervision. Colloquia meet once a week for 50 minutes and culminate in a paper or scientific project, which provides the major part of the grade. The minimum enrollment is two and the maximum is 12. Topics vary from semester to semester. **Offered fall semester.**

**PHYS 287  Sophomore Honors Colloquium (1 credit)**
*Prerequisite: Open to Commonwealth Honors students and to others at the discretion of instructor*
Sophomore Honors Colloquium in physics allow exceptionally able students to explore a challenging topic in small classes under close faculty supervision. Colloquia meet once a week for 50 minutes and culminate in a paper or scientific project, which provides the major part of the grade. The minimum enrollment is two and the maximum is 12. Topics vary from semester to semester. **Offered fall semester.**

**PHYS 298  Second Year Seminar (Speaking Intensive) (3 credits)**
*Prerequisite: _ _ _ _ 199; Open to all sophomores and juniors who have completed ENGL 101, and the speaking skills requirement. Students with 54 or more transfer credits will have this requirement waived. Cannot be taken if _ _ _ _ 299 is taken for credit. Second Year Seminars (SYS) are speaking-intensive, topic courses that build on the academic skills and habits introduced in the First Year Seminar. SYS courses engage students in a specific academic area of interest and provide them with the opportunity to reinforce, share and interpret knowledge. Students will improve their speaking, reading, research and basic information and technology skills while building the connections between scholarship and action that are required for lifelong learning. These courses will fulfill the Second Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one SYS course may be taken for credit. (CSYS)**

**PHYS 299  Second Year Seminar (Writing Intensive) (3 credits)**
*Prerequisite: _ _ _ _ 199; Open to all sophomores and juniors who have completed ENGL 101 and ENGL 102. Students with 54 or more transfer credits will have this requirement waived. Cannot be taken if _ _ _ _ 298 is taken for credit. Second Year Seminars (SYS) are writing-intensive, topic courses that build on the academic skills and habits introduced in the First Year Seminar. SYS courses engage students in a specific academic area of interest and provide them with the opportunity to reinforce, share and interpret knowledge. Students will improve their writing, reading, research and basic information and technology skills while building the connections between scholarship and action that are required for lifelong learning. These courses will fulfill the Second Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one SYS course may be taken for credit. (CSYS)**

**PHYS 338  Honors Tutorial (3 credits)**
*Prerequisite: Open to Commonwealth Honors students and to others at the discretion of instructor*
This course offers honors students the opportunity to study special topics in physics. Three hourly meetings weekly. **Offered fall semester.**

**PHYS 339  Honors Tutorial (3 credits)**
*Prerequisite: Open to Commonwealth and departmental honors students*
This course offers honors students the opportunity to study special topics in physics. Three hourly meetings weekly. **Offered spring semester.**

**PHYS 382  Physics Research Seminar (1 credit)**
The purpose of this seminar is to expose undergraduate students to current physics research - including that being done by Bridgewater State University faculty - and to develop their repertoire of research skills (e.g. literature searches, reading and discussing scholarly/peer reviewed journal articles, grant writing and peer review). Invited speakers will include Bridgewater State University faculty, local physics researchers and graduate students. May be taken two times for credit. The course is graded on a (P) Pass/(N) No Pass basis. **Fall semester.**

**PHYS 391  Solid State Physics (3 credits)**
*Prerequisite: PHYS 401*
Crystal structure; electric, magnetic and thermal properties of matter; transport properties; band theory; and super conductivity will be covered in this course.

**PHYS 401  Modern Physics (4 credits)**
*Prerequisite: PHYS 244*
This course covers theory of relativity, atomic structure, quantum theory, nuclear physics and elementary particles. Three hours of lecture and one three-hour laboratory period weekly. **Fall semester. May be taken for graduate-level credit.**

**PHYS 402  Quantum Mechanics (3 credits)**
*Prerequisite: PHYS 403*
Quantum Mechanics covers wave nature of matter, the Schrodinger equation, application of the Schrodinger equation to the electron, the hydrogen atom, multi-electron atoms and radiation. **Offered alternate years, spring semester. May be taken for graduate-level credit.**
PHYS 403  Mathematical Physics (3 credits)
Prerequisite: PHYS 244 and MATH 251
Vector analysis; matrices, linear differential equations; Sturm-Liouville theory; Fourier series; orthogonal functions; Laplace transform. Spring semester. May be taken for graduate-level credit.

PHYS 408  Astrophysics (3 credits)
Prerequisite: PHYS 401 or consent of instructor
Stellar atmospheres and interiors; generation and transport of energy; stellar evolution, pulsars, blackholes and quasars; galactic structure; cosmology.

PHYS 409  General Relativity and Cosmology (3 credits)
Prerequisite: PHYS 401
Students learn Einstein's general theory of relativity, and the role differential geometry and general covariance play in physics in this course. The class includes significant discussions of modern cosmology, experimental evidence for relativity, and the results of current and ongoing astrophysical measurements. Offered alternate years. May be taken for graduate-level credit.

PHYS 414  Experimental Physics (4 credits)
Prerequisite: PHYS 401
This class introduces students to advanced experimental techniques of physics. Students will perform historically ground-breaking experiments using modern equipment. There will be one lecture and two two-hour laboratory sessions per week. Spring semester. May be taken for graduate-level credit.

PHYS 422  Computer Simulation in Physical Science (3 credits)
Prerequisite: PHYS 243 and PHYS 244 or PHYS 181 and PHYS 182; or consent of instructor
The course introduces methods of computer simulation and its diverse applications. The course is project-oriented. Projects may include planetary motion, chaotic systems, fractal phenomena, random systems, and thermal systems. Methods include the numerical solution of differential equations and Monte Carlo techniques. The course emphasizes structured programming and is recommended for science majors as an introduction to programming. No background in computer programming is required. Two hours of lecture, and one two-hour laboratory period weekly.

PHYS 433  Thermal Physics (3 credits)
Prerequisite: PHYS 244
Thermodynamics, kinetic theory and statistical mechanics are covered in this course. Offered alternate years, fall semester. May be taken for graduate-level credit. (CWRM)

PHYS 438  Electricity and Magnetism (3 credits)
Prerequisite: PHYS 244
This course covers the theory and applications of the fundamental equations of electromagnetism. Offered alternate years, fall semester. May be taken for graduate-level credit.

PHYS 439  Mechanics (3 credits)
Prerequisite: PHYS 243
Vector treatment of forces, torques: dynamics of particles and rigid bodies; work and energy; momentum; small oscillation theory; Lagrangian and Hamiltonian formulation of dynamics are covered in this course. Offered alternate years, fall semester. May be taken for graduate-level credit.

PHYS 442  Digital Electronics I (4 credits)
Prerequisite: College-level course in physics or consent of the instructor
Digital Electronics I covers elements of digital electronics: Boolean algebra of switching circuits, binary logic circuits, digital computer logic circuits. Three hours of lecture and one three-hour laboratory period weekly. Fall semester. May be taken for graduate-level credit.

PHYS 458  Advanced Electricity and Magnetism (3 credits)
Prerequisite: PHYS 438
This course is a continuation of PHYS 438. Maxwell's equations and their connection to special relativity are explored. The propagation of electromagnetic radiation predicted by Maxwell, the transfer of energy determined by Poynting's theorem, and the relativistic generalization of the Larmor formula for the radiation by accelerated charges will be studied. Offered alternate spring semesters.

PHYS 459  Advanced Mechanics (3 credits)
Prerequisite: PHYS 439
A more in-depth study of mechanics than PHYS 439 is offered. This course prepares the student for graduate work. Offered alternate spring semesters.

PHYS 460 Advanced Quantum Mechanics (3 credits)
Prerequisite: PHYS 402
A more in-depth study of quantum mechanics than PHYS 402 is provided in this course. This course prepares students for graduate work. Offered alternate fall semesters.

PHYS 485 Honors Thesis (3 credits)
Prerequisite: Open to Commonwealth and Departmental Honors students; formal application required
One-hour weekly meetings with the thesis director will culminate in an honors thesis. With the consent of the Departmental Honors Committee and the thesis director, this course may be extended into a second semester for three additional credits depending upon the scope of the project. Whether the final version of the thesis qualifies the student to graduate with honors will be determined by the Departmental Honors Committee. Offered fall or spring semester.

PHYS 498 Internship in Physics (3-15 credits)
Prerequisite: Consent of the department; formal application required
The internship offers students an opportunity to gain laboratory experience in industrial or government laboratories, or academic laboratories at other institutions. This course may be repeated for a maximum of 15 credits. Either semester.

PHYS 499 Directed Study in Physics (1-3 credits)
Prerequisite: Consent of the department; formal application required
Directed study is open to juniors and seniors who have demonstrated critical and analytical abilities in their studies and who wish to pursue a project independently. This course may be taken twice for a maximum of six credits. Offered either semester.

PHYS 502 Research (3 or 6 credits)
Prerequisite: Consent of the department; formal application required
Original research undertaken by the graduate student in their field. For details, consult the paragraph titled “Directed or Independent Study” in the “College of Graduate Studies” section of this catalog. This course may be repeated for a maximum of six credits.

PHYS 503 Directed Study (1-3 credits)
Prerequisite: Consent of the department; formal application required
Directed study is designed for the graduate student who desires to study selected topics in a specific field. For details, consult the paragraph titled “Directed or Independent Study” in the “College of Graduate Studies” section of this catalog. This course may be repeated for a maximum of six credits.

PHYS 560 Special Topics in Physics Teaching (variable credit)
Special topics of current relevance in physics education. The topic to be addressed will be announced prior to registration. May be taken more than once with the consent of the adviser.

PHYS 593 Special Topics in Secondary School Science (3 credits)
An introduction to the environmental and energy-related physical science topics presented in the secondary school science curricula. Special emphasis will be placed upon the science content found in these curricula materials. Lectures, seminars, laboratory work, workshops and model classes will be included in this course. This course may be repeated for different topics.

PHYS 594 Special Topics in Middle School Science (3 credits)
This course is an introduction to middle school science programs. Special emphasis will be placed upon the science content found in these curricula materials. Lectures, seminars, laboratory work and model classes will be included in this course. This course may be repeated for different topics.

PHYS 597 Special Topics in Elementary Science (3 credits)
An introduction to elementary school science materials. Special emphasis will be placed upon the study of the science content included in these materials. Lectures, laboratory work, seminars, workshops, and model classes will be included in this course. This course may be repeated for different topics.

Physics: Other Approved Courses

PHYS 435 Optics
PHYS 525 Problem Solving in Chemistry and Physics
POLITICAL SCIENCE

POLI 135  Freshman Honors Colloquium (1 credit)
Prerequisite: Open to Commonwealth Honors students and to others at the discretion of instructor
Freshman Honors Colloquia in political science allow exceptionally able students to explore a challenging topic in small classes under close faculty supervision. Colloquia meet once a week for 50 minutes and culminate in a paper or scientific project which provides the major part of the grade. The minimum enrollment is two and the maximum enrollment is 12. Topics vary from semester to semester. Fall semester.

POLI 136  Freshman Honors Colloquium (1 credit)
Prerequisite: Open to Commonwealth Honors students and to others at the discretion of instructor
Freshman Honors Colloquia in political science allow exceptionally able students to explore a challenging topic in small classes under close faculty supervision. Colloquia meet once a week for 50 minutes and culminate in a paper or scientific project which provides the major part of the grade. The minimum enrollment is two and the maximum enrollment is 12. Topics vary from semester to semester. Spring semester.

POLI 172  Introduction to American Government (3 credits)
The purpose of the course is to introduce students to the range of research on American political institutions and processes. Students will examine the constitutional underpinnings of American government, the role of political parties, interest groups and the media in the system. Students will also explore the changing character of political institutions: the presidency, Congress and the courts. (CSOC; CUSC)

POLI 199  First Year Seminar (3 credits)
Prerequisite: Open to all freshmen with a writing placement score of 3 or above or a SAT score of 500 or above or who have completed ENGL 101. Students with 24 or more transfer credits will have this requirement waived.
First Year Seminars (FYS) are writing-intensive, topic courses that introduce students to academic thought, discourse and practices. FYS courses prepare and orient students toward productive and fulfilling college careers by actively engaging them in a specific academic area of interest. Students will improve their writing, reading, research and basic information and technology skills while learning to work both collaboratively and independently. These courses will fulfill the First Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one FYS course may be taken for credit. (CFYS)

POLI 201  Citizenship and Community Leadership (3 credits)
This course explores three fundamental questions: 1) What do we mean by “citizenship” and why do we care about “good” citizenship?; 2) What is the nature of leadership and how do we develop strong, effective leaders?; and 3) How might we effectively engage citizens and public leaders together in democratic governance to produce solutions to social, economic, and political problems? A service-learning course requirement will guide the student toward discovery of the role of citizenship in strengthening and improving communities. Students will also be expected to attend campus events that are related to civic education, community leadership and political affairs.

POLI 250  Research Methods in Political Science (3 credits)
Prerequisite: One core curriculum requirement in Foundations of Mathematical Reasoning
This course provides students with a foundation for reading and assessing the quality of published research in the social sciences, with particular emphasis on the research techniques common in political science and public administration. It introduces the concepts of theory development, hypothesis testing and statistical significance, and provides students with the rudimentary skills, from literature review searches through data analysis necessary to conduct their own research. Writing is emphasized. (Formerly POLI 350) (CSOC; CQUR)

POLI 260  International Relations (3 credits)
This course introduces modern world politics, with emphasis on change and continuity in the structure and processes governing relations within the international community. Emphasis will be placed on the nation-state dilemmas facing the global community. Either semester. (CSOC)
POLI 274  Western Political Thought - Plato to the Present (3 credits)
This course covers the principal ideas and philosophies of politics articulated by philosophers and political thinkers since ancient times. The student will be introduced to many of the age-old and puzzling questions of how people can best govern themselves using legal, institutional and behavioral approaches. Fall semester. (CSOC; CWRT)

POLI 275  Comparative Government (3 credits)
This course covers political behavior and government systems in Great Britain, France, Russia, etc. Fall semester. (CGCL; CSOC; CMCL)

POLI 277  American Government: State and Local (3 credits)
Prerequisite: POLI 172
This course focuses on state government and politics with emphasis on Massachusetts affairs. Either semester. (CSOC; CUSC)

POLI 279  Introduction to Public Administration (3 credits)
The relationship of the administrative branch of government to other branches in the making and implementation of public policy; theories of government organization for efficient administration; problems of budgeting, personnel, merit systems, type of agency organization, popular control over the bureaucracy. Either semester. (CSOC; CUSC)

POLI 285  Law and the Judicial Process (3 credits)
This course provides an introduction to law and the judicial process in the United States and around the world. It examines different types of legal systems and sources of law; various competing theories of jurisprudence and legal methodology; the organization, operation, and powers of courts; the selection and retention of judges; and the role of the legal profession in society. Particular emphasis will be placed on legal reasoning and the judicial decision-making process in a variety of issue areas, including administrative, environmental, constitutional, criminal, civil, and statutory law cases. (CSOC; CUSC; CWRT)

POLI 286  Sophomore Honors Colloquium (1 credit)
Prerequisite: Consent of instructor
Sophomore Honors Colloquia in political science allow exceptionally able students to explore a challenging topic in small classes under close faculty supervision. Colloquia meet once a week for 50 minutes and culminate in a paper or scientific project which provides the major part of the grade. Open to Commonwealth Honors students and to others at the discretion of the instructor. The minimum enrollment is two and the maximum enrollment is 12. Topics vary from semester to semester. Fall semester.

POLI 287  Sophomore Honors Colloquium (1 credit)
Prerequisite: Consent of instructor
Sophomore Honors Colloquia in political science allow exceptionally able students to explore a challenging topic in small classes under close faculty supervision. Colloquia meet once a week for 50 minutes and culminate in a paper or scientific project which provides the major part of the grade. Open to Commonwealth Honors students and to others at the discretion of the instructor. The minimum enrollment is two and the maximum enrollment is 12. Topics vary from semester to semester. Spring semester.

POLI 298  Second Year Seminar (Speaking Intensive) (3 credits)
Prerequisite: _ _ _ _ 199; Open to all sophomores and juniors who have completed ENGL 101, and the speaking skills requirement. Students with 54 or more transfer credits will have this requirement waived. Cannot be taken if _ _ _ _ 299 is taken for credit. Second Year Seminars (SYS) are speaking-intensive, topic courses that build on the academic skills and habits introduced in the First Year Seminar. SYS courses engage students in a specific academic area of interest and provide them with the opportunity to reinforce, share and interpret knowledge. Students will improve their speaking, reading, research and basic information and technology skills while building the connections between scholarship and action that are required for lifelong learning. These courses will fulfill the Second Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one SYS course may be taken for credit. (CSYS)

POLI 299  Second Year Seminar (Writing Intensive) (3 credits)
Prerequisite: _ _ _ _ 199; Open to all sophomores and juniors who have completed ENGL 101 and ENGL 102. Students with 54 or more transfer credits will have this requirement waived. Cannot be taken if _ _ _ _ 298 is taken for credit. Second Year Seminars (SYS) are writing-intensive, topic courses that build on the academic skills and habits introduced in the First Year Seminar. SYS courses engage students in a specific academic area of interest and provide them with the opportunity to reinforce, share and interpret knowledge. Students will improve their writing, reading, research and basic information and technology skills while building the connections between scholarship and action that are required for lifelong learning. These courses will fulfill the Second Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one SYS course may be taken for credit. (CSYS)

POLI 301  Model Senate Practicum (1 credit)
**POLI 302  Moot Court and Mock Trial Practicum (1 credit)**

*Prerequisite: POLI 172 and consent of instructor*

This course involves students adopting the roles of both lawyers and witnesses in "mock" civil and criminal cases, and/or participating as lawyers arguing cases before appellate courts in "moot" court competitions. Students will be expected to participate at local, regional, and national competitions, and in doing so will acquire first-hand knowledge of what it is like to be both an attorney arguing a case before a judge, and a witness on the stand providing testimony. In addition, students will gain valuable experience in preparing opening statements and closing arguments, writing briefs, cross-examining witnesses, and providing authentic, credible testimony. One credit per semester; may be taken up to four times.

**POLI 338  Honors Tutorial in Political Science (3 credits)**

*Prerequisite: Consent of the political science department*

This course offers special topics in Political Science. Open to Commonwealth and Departmental Honors students.

**POLI 339  Honors Tutorial in Political Science (3 credits)**

*Prerequisite: Consent of the political science department*

This course offers special topics in Political Science. Open to Commonwealth and Departmental Honors students.

**POLI 341  Constitutional Law and Politics: The Powers of Government (3 credits)**

This course offers a close analysis of the structure and power of those institutions comprising the U.S. national government. Legal decisions pertaining to judicial, congressional, and executive power, as well as the doctrines of separation-of-powers and federalism, will be carefully examined. The course concludes with an examination of the Constitution's protection of economic liberty and property rights.

**POLI 342  Constitutional Law and Politics: The First Amendment (3 credits)**

This course examines major court decisions involving disputes pertaining to the First Amendment of the U.S. Constitution. In particular, cases regarding freedom of speech, the press, religion, and the right to associate will be extensively studied. The course also considers the broad limits placed on the government by the First Amendment's Establishment Clause.

**POLI 343  Constitutional Law and Politics: Liberty and Equality (3 credits)**

This course addresses the scope of the individual's rights to liberty and equality under the fifth, ninth, and 14th Amendments of the U.S. Constitution. It examines the evolution of legal doctrine regarding the unequal treatment of individuals by public and private actors, including discrimination based on race, ethnicity, religion, sex, sexual orientation, class, age, and (dis)abilities. The course also analyzes the scope of liberty and privacy in the United States, with particular attention devoted to procedural and substantive due process, sexual freedom, procreation and child-rearing, the right to die, and personal information and workplace privacy.

**POLI 344  Constitutional Law and Politics: Rights of the Accused (3 credits)**

This course addresses how the U.S. Constitution -- particularly the fourth, fifth, sixth, eighth and 14th Amendments -- along with state and federal statutes, protect individuals being processed by the criminal justice system. Issues and case law pertaining to searches and seizures, compelled self-incrimination, grand jury indictment, trial by jury, speedy and public trials, double jeopardy, the right to counsel, cruel and unusual punishment, and due process will be rigorously examined.

**POLI 361  International Political Economy (3 credits)**

*Prerequisite: POLI 260*

This course examines the reciprocal interaction between states and markets, with a particular emphasis upon the ways in which national and international politics structure international economic relations. The course reviews in depth the development and evolution of the postwar economic regimes in money and trade. The course will also examine the role and effects of multinational corporations, the issue of development and alternative development models, the debt crisis, and international struggle for the control of oil. Finally, some important issues and debates within the field of international political economy will be considered.

**POLI 364  Political Communication (3 credits)**

Cross Listed with COMM 364

*Prerequisite: Restricted to juniors or above; or consent of instructor*

This course surveys political communication with an emphasis on forms, characteristics, and functions within political campaigns and institutional governance. Specific attention will be given to communication of the three branches of government. Students will gain a broad
knowledge of how political communication can shape expectations and interpretations of current events, political actors, and the political process.

**POLI 365 International Politics of the Environment (3 credits)**  
*Prerequisite: POLI 260*  
This course focuses on some of the major issues of global environmental politics – those environmental problems that transcend state boundaries and whose resolution requires state cooperation and the efforts of states to negotiate environmental agreements. Cases will include, among others, the control of ozone depletion, the limitation of global warming, and the preservation of forests and bio-diversity.

**POLI 366 Terrorism and U.S. National Security (3 credits)**  
*Prerequisite: POLI 260 or consent of instructor*  
The primary objective of the course is to explore the phenomenon of terrorism and how the United States attempts to address it as a central element of national security policy. Students will explore a wide variety of themes related to national security. Terrorism, particularly its international dimensions, will be placed in the context of national security and global politics.

**POLI 368 American Political Thought (3 credits)**  
*Prerequisite: POLI 172 or consent of instructor*  
This course examines the principal issues and ideas of the American colonial, revolutionary, and founding periods and their influence on, and relevance to, contemporary American politics.

**POLI 372 Legislative Process and Procedure (3 credits)**  
*Prerequisite: POLI 172*  
This course is an examination of the United States Congress. Emphasis is placed on internal structure and operations, congressional rules and procedures, party leadership, committee system and seniority, external influences on Congress, incentives for congressional behavior, and constitutional limitations.

**POLI 375 American Political Parties and Interest Groups (3 credits)**  
*Prerequisite: POLI 172*  
This course is an examination of American political party organizations, political leadership, finance, campaign techniques, the historical development of the American party system, party identification, legal controls over parties, the functions and methods of pressure groups and their interaction with policy makers, the role of surrogate organizations such as the media and political consultants, the significance of political parties and pressure groups for democratic ideology, and the problems of political leadership in a democracy.

**POLI 376 Urban Politics (3 credits)**  
*Prerequisite: POLI 172 and POLI 277*  
This course emphasizes both the formal and informal political institutions and processes in American cities and suburbs, including governmental structures, political parties, interest groups, and service delivery systems. Special attention is given to the multi-ethnic and multicultural context within which urban politics in the United States takes place.

**POLI 377 Canadian-American Political Relations (3 credits)**  
*Prerequisite: POLI 260 or consent of instructor*  
The course will specifically examine the Canadian-American political relationship through the review of prominent bilateral security, economic, environmental and jurisdictional issues. Principal emphasis will be placed on analyzing bargaining between Ottawa and Washington over a wide range of select case studies.

**POLI 379 Voters, Elections and Campaigns (3 credits)**  
*Prerequisite: POLI 172*  
This course is an examination of how citizens make electoral decisions, including the decision to participate in elections. The course compares models of voter behavior and probes the influence of such factors as party identification, opinions on issues, ideological orientations, and candidate evaluations; the social and economic context of voting is also examined, as is the importance of elections for policy-making and the functioning of the political system. In addition, the politics of candidate nominations is explored – mass media coverage and opinion polling; the citizen's involvement in campaign politics; voter attitudes toward parties, candidates, and issues; and the interpretation of electoral outcomes.

**POLI 380 Public Opinion and Mass Political Behavior (3 credits)**  
*Prerequisite: POLI 172*  
This course is an examination of the nature of contemporary public opinion in the United States, the way in which political attitudes and beliefs find expression in electoral behavior and the conditions under which public sentiment is translated into public policy and
government action. The goal is to understand political conflict and debate in the U.S. and the ways in which the public influences that debate. Major topics in public opinion include political tolerance and trust, attitudes toward women and minorities, the role of mass media and the impact of political values and ideology on political campaigns and elections.

POLI 381 United States and Latin American Relations (3 credits)
Prerequisite: POLI 172 and POLI 260
This course covers the evolution and current status of the political, economic and strategic relationship between the United States and the Latin American nations. Offered alternate years.

POLI 382 Latin American Government and Politics (3 credits)
Prerequisite: POLI 172 and POLI 275
This course is a survey of the current governing structures and the general political conditions in the major Latin American nations. Offered alternate years.

POLI 384 United States Foreign Policy (3 credits)
Prerequisite: POLI 260 or consent of instructor
This course is the study of the national interests and policy instruments that have formed and guided the foreign relations of the United States in the post 1945 period. Offered alternate years, spring semester.

POLI 385 Government and Politics in the Middle East (3 credits)
Prerequisite: POLI 172 and POLI 275; or consent of instructor
This course provides an introduction to the structures and processes of Middle Eastern government and politics, focusing on the evolution of contemporary Middle East since the end of World War I and on economic growth, social change, and political development in the region and in specific countries. Offered alternate years, spring semester.

POLI 386 Canadian Politics (3 credits)
Prerequisite: POLI 172 and POLI 275; or consent of instructor
An intensive study of the Canadian political system, with particular emphasis on Canada's constitutional turmoil, political institutions and electoral behavior. Offered alternate years.

POLI 387 Government and Politics of Africa (3 credits)
Prerequisite: POLI 172 and POLI 275; or consent of instructor
An introduction to the organization and processes of African politics centering on the political evolution of contemporary Africa in general but with specific attention to selected nations as appropriate. Offered alternate years, spring semester.

POLI 388 The Government and Politics of Eastern Europe (3 credits)
Prerequisite: POLI 275
This course will introduce students to the governmental structures and political processes of Eastern European countries, including Russia. Included in the course will be a study of national goals, policies and relations with other countries, and the ideological framework that make up these societies.

POLI 389 Racial Politics in the United States (3 credits)
Prerequisite: POLI 172
This course explores racial politics in the United States. It examines classic and contemporary scholarship on the following topics: social movements, collective action, voting and turnout, key provisions of the Voting Rights Act, social science perspectives on the Voting Rights Act, the concept of voting rights and democratic theory, the relationships between race, representation and political institutions, party politics and racial reorientation, the magnitude and structure of intolerance and its implications for democracy, and the causes and consequence of political socialization.

POLI 390 Public Finance (3 credits)
Prerequisite: POLI 279 or consent of instructor
The role of government in a market economy; the role of taxation in a market economy; principles of taxation; problems of budgeting, government expenditure and debt; and economic growth. Spring semester.

POLI 391 The American Presidency (3 credits)
Prerequisite: POLI 172
The purpose of the course is to explore the institution of the American presidency. It examines the constitutional prerogatives and organizational structure of the presidency, how presidential power developed historically, presidential selection and the nomination process, and decision-making. In addition, the course explores the relationship between the presidency and other institutions, both political and nonpolitical: the Congress, the bureaucracy, the courts and the media.
POLI 392  Democratic Theory and Democratization (3 credits)
Prerequisite: POLI 275 or consent of instructor
The course considers the contemporary challenges to democracy in terms of the great issues posed by both democratic theorists and philosophers. These views will be analyzed in terms of the authoritarian, military, religious, ethnic and economic problems faced by countries undergoing democratization.

POLI 400  Special Topics in Political Science (3 credits)
Prerequisite: Nine credits in political science or consent of instructor
A topic of special interest to faculty and/or students will be explored. May be taken for credit more than once.

POLI 455  Totalitarian Political Systems: Dictators and the Reign of Terror (3 credits)
Prerequisite: POLI 272 or consent of instructor
This is a course in totalitarianism as a form of political organization. The goal is to review, explain and understand the following: 1) the political, social, ideological and economic forces that give rise to this extremist form of polity; 2) the various mechanisms through which totalitarian rule manifests itself and is exercised; and 3) the role and influence of key political decision makers in totalitarian states.

POLI 473  Globalization and Global Governance (3 credits)
Prerequisite: POLI 260 or consent of instructor
This course provides a thorough understanding of the nature of globalization, the new and varied forms of social, economic and political interactions it has produced in the world, and the challenge of governing the resulting complex interdependence among subnational, national, regional, international and non-governmental actors.

POLI 475  Senior Seminar in Political Science (3 credits)
Prerequisite: Admission is subject to the consent of the department chairperson and instructor. Students must register prior to the end of the pre-registration period
The undertaking of independent study and a research project presented in oral and written form. Either semester. (CWRM)

POLI 476  Women and Politics (3 credits)
Prerequisite: POLI 172 or consent of instructor
Analysis of the role of women in current American politics. The focus is on changing trends in women's electoral participation, political interest and office seeking over the last several decades, and recent gender differences in political involvement, candidate support, support for women's issues and support for other public policies.

POLI 479  Public Policy (3 credits)
Prerequisite: POLI 172 and POLI 277
A systematic study of theory and practice in the making and the execution of public policy including the factors of public demand on the political system; decision-making in the public sector; tools and techniques for implementation and evaluation; and the import for future planning.

POLI 485  Honors Thesis in Political Science (3 credits)
Prerequisite: Open to Commonwealth and Departmental Honors students and consent of the department
One-hour weekly meetings with the thesis director will culminate in an honors thesis. With the consent of the Departmental Honors Committee and the thesis director, this course may be extended into a second semester for three additional credits depending upon the scope of the project. Whether the final version of the thesis qualifies the student to graduate with Honors will be determined by the Departmental Honors Committee. Offered either semester.

POLI 488  Politics and Development in the Third World (3 credits)
Prerequisite: POLI 260 and POLI 275; or consent of instructor
A survey of the political dynamics of development in the Third World with special emphasis on the dominant theories of development, current critical issues in the Third World, internal and external forces affecting Third World countries, and the policy directions taken by developing nations. Offered alternate years.

POLI 490  Political Science Studies in Oxford (3 credits)
Study of selected topics in political science including comparative politics. European government and law and legal systems. Open to juniors and seniors only. (This is a special program in England at Oxford University during July. Additional fees are required.)

POLI 495  Administrative Law and Regulation (3 credits)
Prerequisite: POLI 279 or consent of instructor
The legal and regulatory systems of federal, state and local governments will be analyzed as to their relationship to policy implementation
and administration. Emphasis will be placed on charters, ordinances, legislative power, and administrative control in areas such as finance, personnel, labor, land use, licensing and education. Offered alternate years. (Formerly POLI 395)

**POLI 498 Internship in Political Science (3-15 credits)**  
*Prerequisite: Consent of the department chairperson; formal application required*  
A non-classroom experience intended to complement the academic preparation of a limited number of juniors and seniors majoring in political science. Placements are in areas such as federal, state, city and town governments and private-interest groups. This course may be repeated for a maximum of 15 credits. *Either semester.*

**POLI 499 Directed Study in Political Science (1-3 credits)**  
*Prerequisite: Consent of the department chairperson; formal application required*  
Directed study is open to juniors and seniors who have demonstrated critical and analytical abilities in their studies and who wish to pursue a project independently. This course may be taken twice for a maximum of six credits. *Offered either semester.*

**POLI 501 Introduction to Public Institutions and Administration (3 credits)**  
This course is designed to provide students with an understanding of the institutional, political, and normative context of public administration. The course will introduce students to the central issues, values and dilemmas facing the contemporary public service professional. By the end of the course, the successful student should have a better appreciation and understanding of the political nature and dynamics of public service in a democratic society. It is to be taken among the first four courses in the program. Introductory/background information in American government or public administration is beneficial to students enrolling in this course. *Either semester.*

**POLI 502 Research (3 or 6 credits)**  
*Prerequisite: Consent of the department chairperson; formal application required*  
Original research undertaken by the graduate student in their field. For details, consult the paragraph titled “Directed or Independent Study” in the “College of Graduate Studies” section of this catalog. This course may be repeated for a maximum of six credits.

**POLI 503 Directed Study (1-3 credits)**  
*Prerequisite: Consent of the department chairperson; formal application required*  
Directed study is designed for the graduate student who desires to study selected topics in a specific field. For details, consult the paragraph titled "Directed or Independent Study" in the "College of Graduate Studies" section of this catalog. This course may be repeated for a maximum of six credits.

**POLI 505 Public Management (3 credits)**  
*Prerequisite: POLI 501; or consent of instructor and MPA program coordinator*  
This course gives students broad exposure to the job of the public manager including an introduction to the specific management areas. The course emphasizes both traditional and cutting-edge principles of management. The topics include planning for public agencies, organizational structure and development, staffing, training, and motivating employees, leadership development, financing and budgeting for public programs, designing and implementing programs, management decision-making, evaluating and monitoring programs and ethical considerations for public managers. *Spring semester.*

**POLI 506 Public Administration Training Module (1 credit)**  
*Prerequisite: Matriculation in the MPA program or consent of MPA program coordinator*  
As part of the 15 credit hours of elective courses (nine credits for students selecting a concentration), each MPA student must take three credit hours of PA Training Modules. These modules earn one credit each and are scheduled for either two Saturday sessions during the semester or for weekend “intensive” classes meeting for about 15 hours. Students are expected to put in appropriate out-of-class time and must successfully pass three modules covering a range of topics, including ethics in public service, managerial communication, conflict resolution, diversity in public administration, and information management, technology applications and policy. At least two of the three modules must address elements of information management, technology applications and policy. Modules will be designed to facilitate student efforts to meet this requirement. Graded on a (P) Pass/ (N) No Pass basis.

**POLI 510 Introduction to Research in Public Administration (3 credits)**  
*Prerequisite: POLI 501; or consent of instructor and MPA program coordinator*  
This course is an examination of basic research methods and their use in public administration both from the standpoint of public policy and public management. Topics covered include the scientific method, experimental and quasi-experimental research designs, sampling and methods of data collection such as interviewing and questionnaire construction. The course provides students with practical experience using computer software for data analysis. *Fall semester.*

**POLI 511 Program Evaluation and Policy Analysis (3 credits)**
**POLI 510**
This course examines the body of constitutional and statutory law that regulates how state and federal administrative agencies implement their programs.

**Prerequisite:** POLI 501; or consent of instructor and MPA program coordinator

**Spring semester.**

**POLI 513 Strategic Planning and Performance Measurement in Public Administration (3 credits)**

**Prerequisite:** POLI 501; or consent of instructor and MPA program coordinator

Strategic planning and performance measurement guide public administrators in establishing program outcomes, in planning short-term goals, in clarifying long-term expectations and in informing and improving results for citizens and agency stakeholders. Measurement of outcomes requires understanding the relationship between resource inputs, program outputs, and objectively and subjectively measured outcomes. Theories of participation, resources management, sustainable development and research methods guide the decision-making tools presented in this class. This course will focus on mission and vision design, SWOT analysis, strategic planning, budget performance management and performance measurement. This course has a service-learning component.

**POLI 521 Public Finance (3 credits)**

**Prerequisite:** POLI 501; or consent of instructor and MPA program coordinator

This course covers the principal aspects of public financial management including accounting, budgeting, capital budgeting, revenue forecasting, risk management, pension management and auditing. **Fall semester.**

**POLI 531 Public Personnel (3 credits)**

**Prerequisite:** POLI 501, which may be taken concurrently; or consent of instructor and MPA program coordinator

This course focuses on selected topics in the study and practice of public personnel administration. It is designed as an in-depth analysis of the literature, problems and directions of public personnel issues. Students will develop an appreciation for the dynamic political environment as it influences human resources managers and the statutory and constitutional restrictions that distinguish public personnel management from its counterpart in the private sector. **Spring semester.**

**POLI 532 Organizational Theory and Behavior for Public and Nonprofit Institutions (3 credits)**

**Prerequisite:** POLI 501, which may be taken concurrently; or consent of instructor and MPA program coordinator

This course focuses on the types and levels of management that must be integrated in the pursuit of public sector excellence. These levels involve the behavior of individuals; pairs of individuals; supervisor/subordinate relationships; client/administrator relationships; and small groups acting under political, legal and ethical constraints. Institutional and psychological factors will be analyzed. **Fall semester.**

**POLI 533 Administrative Ethics (3 credits)**

**Prerequisite:** POLI 501, which may be taken concurrently; or consent of instructor and MPA program coordinator

This course will explore the values that shape the thinking of public administrators, and the practice of dealing with moral and ethical issues in the field. The main objectives are 1) to gain familiarity with key issues in public, professional, and administrative ethics, 2) to apply ethical principles to public management and to policy analysis, and 3) to understand the nexus between formal legal and informal normative ethical imperatives.

**POLI 534 Public Service Leadership (3 credits)**

**Prerequisite:** POLI 501, which may be taken concurrently; or consent of instructor and MPA program coordinator

This course focuses on the art and science of recognizing and becoming better leaders. Students will explore various theories of leadership and develop a broader understanding of the core characteristics and competencies of excellent public service leaders. The course aims to integrate theory and practice, with a strong emphasis on assisting students in identifying their own leadership strengths and vulnerabilities. The effect of leadership on organizational and process outcomes will be a theme throughout the course, as will leaders as change agents. Peer-evaluation, mutual support, hands-on experience and public service underpin this course.

**POLI 541 Legislative-Executive Relations (3 credits)**

**Prerequisite:** POLI 501; or consent of instructor and MPA program coordinator

This course gives students broad exposure to the relationship between legislative and executive branches of government. The course emphasizes the role of the legislature and executive branch agencies in lawmaking and budgetary processes, legislative oversight of bureaucracy, the importance of constituency service and how it impacts government agencies, legislative and bureaucratic behavioral motives and goals, the politics of bureaucratic appointments and how chief executives increase their influence over the administrative state, the influence of lobbies on government, as well as how agencies effectively mobilize constituency groups and advocate their programs.

**POLI 542 Administrative Law and Regulation (3 credits)**

**Prerequisite:** POLI 501; or consent of instructor and MPA program coordinator

This course examines that body of constitutional and statutory law that regulates how state and federal administrative agencies implement...
policies enacted by the legislative and executive branches of government. The course examines issues concerning the delegation of legislative power to administrative agencies; agency rulemaking and adjudication; the Administrative Procedure Act; legislative, executive, and judicial review of administrative agency actions; and issues regarding the citizen’s freedom of access to information and records of administrative agencies. A close examination is given to questions and concerns regarding the democratic legitimacy of administrative agencies, theories of regulation and regulatory policy, and how administrative agencies fit into the constitutional system of government in the United States.

POLI 543 Executive Decision-Making and Leadership in the 21st Century (3 credits)  
Prerequisite: POLI 501; or consent of instructor and MPA program coordinator  
This course examines the theories, modes of operation and challenges of modern day political leadership and executive decision-making. Emphasis will be placed on utilizing case studies, crisis situations, simulations and personal profiles to develop a comprehensive exploration of the leadership characteristics and decision-making strategies of political and governmental officials in the 21st century.

POLI 551 Managing Economic and Community Development (3 credits)  
Prerequisite: POLI 501; or consent of instructor and MPA program coordinator  
This course introduces students to the many dimensions of economic development at the local and state level, focusing on aspects of how local governments are engaging themselves in this competitive arena. The course explores the following fundamental questions: Who is involved in local economic development? What policies and programs are being pursued and how are they being implemented? What is the impact of local economic development programs? How does local politics influence economic development actions? In addition, the course covers how the external environments (federal policy and national/regional economic cycles, for example) shape the scope and method of economic development at the local level.

POLI 552 Municipal Organization and Management (3 credits)  
Prerequisite: POLI 501; or consent of instructor and MPA program coordinator  
This course emphasizes the study and understanding of municipal organization and management in Massachusetts and across the United States. It examines the issues, problems, and opportunities that confront municipal leaders as they strive to deliver quality public services in an efficient and effective manner. The topics in the course will cover the legal and structural aspects of local governments, how managers plan and direct the organization, revenue and expenditure decisions, and how services are delivered. The course will also focus on how the external environment (such as citizens, school boards, and state government) influences the job of the municipal manager. By the end of the course, the successful student should be better prepared to identify and respond to these issues, problems and opportunities in their municipality.

POLI 561 Foundations of Sustainability and Sustainable Development (3 credits)  
Prerequisite: POLI 501, which may be taken concurrently; or consent of instructor and MPA program coordinator  
Sustainable development and sustainability are increasingly important to public administration theory and practice. This course will introduce students to theories of sustainability, provide practical application to policy issues within the field and will teach students to better use planning tools in resources management. Areas of focus include management of natural capital, understanding of systems theories and impacts, management of environmental and human welfare, and conservation history as applied to local global governance and policy-making. Students will be expected to contribute knowledge from their own knowledge base and experiences to enhance the learning environment as service-learning is a component of this course.

POLI 571 Foundations of Civic and Nonprofit Theory and Administration (3 credits)  
Prerequisite: POLI 501, which may be taken concurrently; or consent of instructor and MPA program coordinator  
This course addresses the historical and philosophical roots of what is alternatively called the third, voluntary or nonprofit sector. It also addresses the structure of the sector and current and future trends that influence it. Its purpose is to provide an overview of the issues and trends within the sector in order to lay a strong foundation of knowledge for those who are pursuing a career in nonprofit organizations and/or work in fields that intersect with nonprofit organizations.

POLI 572 Nonprofit Resource Development and Management (3 credits)  
Prerequisite: POLI 501; or consent of instructor and MPA program coordinator  
The purpose of this course is to introduce students to issues and techniques for resource development and management within nonprofit organizations. The course will expand students’ knowledge about the nonprofit sector as well as their fundraising, management and analytical tools. Assignments and discussions, as well as spending time in the community through service-learning projects, will allow students to test knowledge, formulate ideas and strategies, respond to issues and dilemmas and get immediate feedback from classmates and the instructor.

POLI 591 Capstone Seminar in Public Administration (3 credits)  
Prerequisite: Completion of 30 hours of course work  
This course will integrate the various fields of knowledge that the student has acquired over the period of MPA study. Full-time MPA faculty will be responsible for teaching it and the design will not be prescribed; some may choose to teach it as an applied case-study seminar.
while others may develop the course thematically, as an in-depth study of a particular area of public administration literature. *Spring semester.*

**POLI 592  Special Topics in Public Administration (3 credits)**

*Prerequisite: Course prerequisite may be specified depending upon the nature of the topic*

Special topics of current relevance in public administration will be offered from time to time. The topic to be addressed will be announced prior to registration. May be taken more than once with the consent of the adviser.

**POLI 598  Internship: Public Administration (3 credits)**

*Prerequisite: Matriculation in MPA program*

One of the key elements for pre-career students in the Bridgewater State University MPA program is the internship experience. An internship provides an opportunity to apply and test what has been learned in the classroom and allows the student to develop professional skills. The general internship framework is designed to conform to the NASPAA internship guidelines. This course is repeatable for credit.

**Political Science: Other Approved Courses**

- **POLI 273  United States and Massachusetts Constitutions**
- **POLI 330  Asian Politics**
- **POLI 399  Collective Bargaining in the Public Sector**

### PORTUGUESE

**LAPO 101  Elementary Portuguese I (3 credits)**

An introduction to elementary syntactic, semantic, phonetic and paralinguistic structures is offered. Pertinent everyday cultural concepts are discussed. Relevant comparison and contrast with the native language is treated. Functional communication in the second language in a controlled environment is the principal objective of the course. *Note: See the “Departmental Foreign Language Policy” in the “Foreign Languages” section of this catalog.* (CGCL; CHUM)

**LAPO 102  Elementary Portuguese II (3 credits)**

*Prerequisite: LAPO 101; or see the “Departmental Foreign Language Policy” in the “Foreign Languages” section of this catalog*

The further study of elementary syntactic, semantic, phonetic and paralinguistic structures is offered. Pertinent everyday cultural concepts are discussed. Relevant comparison and contrast with the native language is treated. Functional communication in the second language in a controlled environment is the principal objective of the course. (CGCL; CHUM)

**LAPO 151  Intermediate Portuguese I (3 credits)**

*Prerequisite: LAPO 102*

This course is a review of Portuguese grammar with emphasis given to reading, writing, listening and speaking; systematic laboratory practice; an introduction to Portuguese culture. (CGCL; CHUM)

**LAPO 152  Intermediate Portuguese II (3 credits)**

*Prerequisite: LAPO 151*

The course continues to review and reinforce previously acquired skills in Portuguese, in a communicative and functional way. More culturally based materials are introduced, focusing on the Portuguese linguistic and cultural heritage. In this student-centered approach, students make presentations and hold discussions in Portuguese. Dialectal variation (e.g., European vs. Brazilian Portuguese) and the various traditions of Portuguese-speaking countries are addressed.

**LAPO 199  First Year Seminar (3 credits)**

*Prerequisite: Open to all freshmen with a writing placement score of 3 or above or a SAT score of 500 or above. Students with 24 or more transfer credits will have this requirement waived.*

First Year Seminars (FYS) are writing-intensive, topic courses that introduce students to academic thought, discourse and practices. FYS courses prepare and orient students toward productive and fulfilling college careers by actively engaging them in a specific academic area of interest. Students will improve their writing, reading, research and basic information and technology skills while learning to work both collaboratively and independently. These courses will fulfill the First Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one FYS course may be taken for credit. (CFYS)

**LAPO 252  Reading in Portuguese (3 credits)**
Prerequisite: LAPO 151 or consent of instructor
The student is introduced to the reading, analysis and discussion of modern literary and cultural texts from Portuguese-speaking countries. The emphasis is on the development of reading comprehension skills and vocabulary.

LAPO 271  Review of Portuguese Grammar (3 credits)
Prerequisite: LAPO 252
This course is a review of the Portuguese language from the point of view of prescriptive grammar. Some consideration to dialectal variation is given as well. The overall objective of the course is to deepen students' understanding of the syntactic patterns of the language and increase students' lexicon. This course is conducted in Portuguese.

LAPO 272  Portuguese Composition (3 credits)
Prerequisite: LAPO 271
The student develops writing skills utilizing sources from the Portuguese-speaking world. Different writing skills and styles are introduced and practiced. Systematic review of the language is conducted with emphasis on more advanced syntactic patterns. This course is conducted in Portuguese.

LAPO 281  Portuguese Conversation (3 credits)
Prerequisite: LAPO 271 or consent of instructor
The students develop speaking skills utilizing media sources from the Portuguese-speaking world. Different topics of current interest are introduced and discussed. Systematic review of the language is conducted with emphasis on more advanced patterns. This course is conducted in Portuguese.

LAPO 298  Second Year Seminar (Speaking Intensive) (3 credits)
Prerequisite: __ __ __ 199; Open to all sophomores and juniors who have completed ENGL 101, and the speaking skills requirement. Students with 54 or more transfer credits will have this requirement waived. Cannot be taken if __ __ __ 299 is taken for credit.
Second Year Seminars (SYS) are speaking-intensive, topic courses that build on the academic skills and habits introduced in the First Year Seminar. SYS courses engage students in a specific academic area of interest and provide them with the opportunity to reinforce, share and interpret knowledge. Students will improve their speaking, reading, research and basic information and technology skills while building the connections between scholarship and action that are required for lifelong learning. These courses will fulfill the Second Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one SYS course may be taken for credit. (CSYS)

LAPO 299  Second Year Seminar (Writing Intensive) (3 credits)
Prerequisite: __ __ __ 199; Open to all sophomores and juniors who have completed ENGL 101 and ENGL 102. Students with 54 or more transfer credits will have this requirement waived. Cannot be taken if __ __ __ 298 is taken for credit
Second Year Seminars (SYS) are writing-intensive, topic courses that build on the academic skills and habits introduced in the First Year Seminar. SYS courses engage students in a specific academic area of interest and provide them with the opportunity to reinforce, share and interpret knowledge. Students will improve their writing, reading, research and basic information and technology skills while building the connections between scholarship and action that are required for lifelong learning. These courses will fulfill the Second Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one SYS course may be taken for credit. (CSYS)

PSYC 100  Introductory Psychology (3 credits)
This is a survey of the different processes such as perception, sensation, learning and emotion, with a discussion of the underlying physiological processes as well as an introduction to the more complex areas such as personality development, psychopathology, social influences and testing. Methods of investigation and research will be integrated with the above topics. Either semester. (CSOC)

PSYC 150  Orientation to the Psychology Major (1 credit)
This course is an introduction to the department, its faculty and courses, with an emphasis on career planning and student development. The students will be introduced to the major fields in psychology with an emphasis on the importance of science and empiricism in understanding psychological phenomena. This course is recommended for anyone considering psychology as a major. All psychology
majors must complete this course during their first year as a degree-seeking psychology major. This course is graded on a (P) Pass/(N) No Pass basis.

PSYC 199  First Year Seminar (3 credits)
Prerequisite: Open to all freshmen with a writing placement score of 3 or above or a SAT score of 500 or above or who have completed ENGL 101. Students with 24 or more transfer credits will have this requirement waived.
First Year Seminars (FYS) are writing-intensive, topic courses that introduce students to academic thought, discourse and practices. FYS courses prepare and orient students toward productive and fulfilling college careers by actively engaging them in a specific academic area of interest. Students will improve their writing, reading, research and basic information and technology skills while learning to work both collaboratively and independently. These courses will fulfill the First Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one FYS course may be taken for credit. (CFYS)

PSYC 200  Non-Western Theories of Personality (3 credits)
Prerequisite: PSYC 100 or consent of instructor
This course examines the conceptual models of personality as they have appeared in non-Western traditions. Differences in focus, emphasis and views of the nature of the self are investigated as they relate to cultural world views such as Hinduism, Buddhism, Taoism and Confucianism. (CGCL; CMCL; CSOC)

PSYC 201  Statistics for Psychology (3 credits)
Prerequisite: PSYC 100 and MATH 100 or higher (except First and Second Year Seminars and MATH 408); or consent of instructor
Statistics for Psychology is primarily a course that will introduce students to the application of statistics to the research process in psychology. Statistics are used to describe and to critically evaluate information. The two branches of statistics, descriptive and inferential statistics, will be covered in this course. Specific procedures that may be covered include measures of central tendency and variability, visual description of data, z-scores, correlation and linear regression, basic probability, parametric tests such as z-tests, t-tests, analysis of variance (ANOVAs), and non-parametric tests such as the chi-square test. (CQUR)

PSYC 215  Service-Learning in Psychology (3 credits)
Prerequisite: Consent of instructor
Topics and partnerships with community agencies may vary from semester to semester. However, every semester students will have an opportunity to learn about some topic(s) in psychology, e.g., boys' development, girls' development, aging, mental illness, etc., and apply those concepts in work with a community partner. In regular class meetings students will read professional literature on the topic, reflect on that work in writing, discussions, media analyses and in other ways. In additional out-of-class experiences, students will engage in community service of some kind using what they have learned in class to inform the service work. Students will be active learners, and they will be encouraged to reflect on and evaluate the service work that they and their community partners do. The course may be repeated twice for a maximum of nine credits, though only the first three credits will count toward the psychology major.

PSYC 224  Child Psychology (3 credits)
Prerequisite: PSYC 100 or consent of instructor
An investigation of the growth and development of the child from conception to pre-adolescence will include both the influence of heredity and other biological factors as well as the social influences of child-rearing practices, family value systems and peer culture effects. Topics will include the development of verbal ability, conscience and moral judgment, personality and self concept. Current theories and research findings will be discussed in relation to the above topics.

PSYC 226  Adolescent Psychology (3 credits)
Prerequisite: PSYC 100 or consent of instructor
An investigation of the growth and development of the pre-adolescent and adolescent including both physical as well as psychological changes relating to intellectual, moral, emotional, personality and social aspects. Current theories and research findings will be discussed in relation to the above topics.

PSYC 227  Developmental Psychology (3 credits)
Prerequisite: PSYC 100 or consent of instructor
This course offers a survey of the life cycle by means of an integrated approach to understanding developmental processes and the individual. The developmental tasks of infancy, childhood, adolescence, and adulthood are viewed from a life-span perspective, with an emphasis on continuity and change.

PSYC 230  Cross-Cultural Psychology (3 credits)
Prerequisite: PSYC 100 or consent of instructor
This course examines various psychological processes such as self-perception, communication, decision-making, categorization of others,
gender perception, aggression, conformity, and helping, from a cross-cultural perspective. Emphasis will be placed on cultural differences in psychological functioning. (CGCL; CMCL; CSOC)

**PSYC 239  Psychology of Aging (3 credits)**  
*Prerequisite: PSYC 100 or consent of instructor*  
This course examines the sensory, cognitive and social changes resulting from old age, including changes in learning, personality and pathology. Problems of adjustment will be discussed and integrated with research findings in gerontology. *(Formerly PSYC 329)*

**PSYC 242  Biopsychology (3 credits)**  
*Prerequisite: PSYC 100 or consent of instructor*  
This course is an introduction to biopsychology, the scientific study of the biology of behavior. A major component to this course involves a detailed analysis of the brain, including how neurons communicate with one another and the identification and functional significance of major brain structures. In this course, students will learn about a variety of systems including those involved in vision, attention, memory, language and movement. Additional topics include brain damage and neuroplasticity, drug addiction and the biopsychological examination of hunger and sleep. Emphasis will be on psychological correlates of neurophysiological processes. *(Formerly PSYC 342)*

**PSYC 269  Psychology of Criminal Behavior (3 credits)**  
*Prerequisite: PSYC 100 or consent of instructor*  
This class covers basic psychological knowledge about the causes of crime and violent crime. Topics include biological causes of crime, family and childrearing causes, social causes, cognitive biases, and psychological and psychiatric issues and the role they play in criminal behavior. Case studies are examined, and basic research is reviewed. *(Formerly PSYC 369)*

**PSYC 298  Second Year Seminar (Speaking Intensive) (3 credits)**  
*Prerequisite: _ _ _ _ 199; Open to all sophomores and juniors who have completed ENGL 101, and the speaking skills requirement. Students with 54 or more transfer credits will have this requirement waived. Cannot be taken if _ _ _ _ 299 is taken for credit.*  
Second Year Seminars (SYS) are speaking-intensive, topic courses that build on the academic skills and habits introduced in the First Year Seminar. SYS courses engage students in a specific academic area of interest and provide them with the opportunity to reinforce, share and interpret knowledge. Students will improve their speaking, reading, research and basic information and technology skills while building the connections between scholarship and action that are required for lifelong learning. These courses will fulfill the Second Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one SYS course may be taken for credit. *(CSYS)*

**PSYC 299  Second Year Seminar (Writing Intensive) (3 credits)**  
*Prerequisite: _ _ _ _ 199; Open to all sophomores and juniors who have completed ENGL 101 and ENGL 102. Students with 54 or more transfer credits will have this requirement waived. Cannot be taken if _ _ _ _ 298 is taken for credit.*  
Second Year Seminars (SYS) are writing-intensive, topic courses that build on the academic skills and habits introduced in the First Year Seminar. SYS courses engage students in a specific academic area of interest and provide them with the opportunity to reinforce, share and interpret knowledge. Students will improve their writing, reading, research and basic information and technology skills while building the connections between scholarship and action that are required for lifelong learning. These courses will fulfill the Second Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one SYS course may be taken for credit. *(CSYS)*

**PSYC 310  Social Psychology (3 credits)**  
*Prerequisite: PSYC 100 or consent of instructor*  
The individual in social situations: attitude formation and change, culture and society, language and communication, leadership and group dynamics, personality characteristics and interpersonal relationships, small group behavior.

**PSYC 313  Industrial and Organizational Psychology (3 credits)**  
*Prerequisite: PSYC 100 or consent of instructor*  
The course will broadly cover the major themes represented by the study of industrial and organizational psychology. The first half of the semester will focus on areas such as job analysis, employee selection, training, performance appraisal and motivation. The second half of the semester will focus on employee behavior within an organizational framework.

**PSYC 320  Research Methods in Psychology (3 credits)**  
*Prerequisite: PSYC 100 and PSYC 201; or consent of instructor*  
This course will focus on research methods in psychology. Students will learn how to conduct, comprehend and critically evaluate research methods used in a diversity of psychological research including, for example, biopsychology, child psychology, social issues, sensation and perception, and learning and motivation. Students will evaluate how real studies test theories and hypotheses and determine how to resolve the conflicting findings of previous research. Proper psychological experimental design and writing format will be emphasized. *(CWRM)*
PSYC 337  Cognitive Psychology (3 credits)
Prerequisite: PSYC 100 and at least nine hours in psychology; or consent of instructor
The psychology of thinking, including historical and philosophical issues, process models, information theory, cybernetic, general systems and field theory approaches, visual and auditory cognition, psycholinguistics, memory and attention, problem solving and concept formation, with implications for mental retardation and learning disabilities.

PSYC 338  Honors Tutorial (3 credits)
Prerequisite: Open to Commonwealth and Departmental Honors students with PSYC 100 and consent of instructor
Special topics in psychology. Three hourly meetings weekly.

PSYC 339  Honors Tutorial (3 credits)
Prerequisite: Open to Commonwealth and Departmental Honors students with PSYC 100 and consent of instructor
Special topics in psychology. Three hourly meetings weekly.

PSYC 344  Drugs and Human Behavior (3 credits)
Prerequisite: PSYC 100 or consent of instructor
An exploration of psychoactive drugs and the way in which they are used in psychology today. Each drug will be studied in terms of the psychological, psychophysiological and behavioral theories of drug effects.

PSYC 349  Perspectives on the Holocaust (3 credits)
Cross Listed with COMM/INTD 349
Prerequisite: PSYC 100 and COMM 130; or consent of instructor
This course introduces students to the study of the Holocaust. It examines the atmosphere and events that allowed the systematic extermination of 11 million non-combatants, including six million Jews. Multidisciplinary in approach, the course draws principally upon psychology and communication studies. Additionally, a variety of social science perspectives are utilized. Recommended for juniors and seniors.

PSYC 350  Special Topics in Psychology (3 credits)
Prerequisite: PSYC 100 and at least six hours in psychology; or consent of instructor
Various and special topics of current interest in psychology will be offered from time to time. Topics will be announced prior to registration. May be taken more than once but only three credits will be counted towards the first 33 hours in the psychology major.

PSYC 352  Psychology of Learning (3 credits)
Prerequisite: PSYC 100 or consent of instructor
The shaping of behavior, laboratory conditioning, reinforcement, approach and avoidance of a goal, discrimination and generalization of physical cues and animal learning experiments. Experimental approaches to the study of human behavior. (Formerly PSYC 252)

PSYC 355  Behavior Analysis (3 credits)
Prerequisite: PSYC 100 or consent of instructor
This course systematically presents the principles that are necessary to analyze everyday human behavior. These principles are then applied to the treatment and prevention of a wide variety of behavior problems in education, clinical settings and the workplace. An emphasis is placed on the research methods used to assess the effectiveness of each procedure used to change behavior.

PSYC 360  Psychology of Personality
Prerequisite: PSYC 100 or consent of instructor
Basic concepts in the field of personality, organized around such topics as motivation, personality structure and dynamics, personality development, assessment and therapy. Problems and styles of adjustments will be considered.

PSYC 370  Abnormal Psychology (3 credits)
Prerequisite: PSYC 100 or consent of instructor
The primary purpose of this course is to define and classify the many different types of abnormal behavior. The genetic, biochemical and environmental causes for each category of behavior are presented. To a lesser degree, the most effective treatments and the degree to which the treatments are successful are evaluated.

PSYC 399  Pre-Honors Psychology Colloquium (1 credit)
Prerequisite: Enrollment in the Honors Program; and a grade of “B” or higher in PSYC 201 and PSYC 320; or consent of instructor
Students will attend a one-hour weekly meeting designed to prepare them for completing an honors thesis. Outcomes for the course include choosing a research topic, choosing a mentor and developing a research proposal.
PSYC 400  Honors Psychology Colloquium (1 credit)
Prerequisite: PSYC 399 or consent of instructor
Students will attend a one-hour weekly meeting that they will enroll in concurrent with PSYC 485 Honor Thesis for a total of two credits over two semesters. This course is defined to support and monitor students with their thesis progress with the objective of competing an honors thesis. This course may be taken twice for up to two credits.

PSYC 410  Applied Social Psychology (3 credits)
Prerequisite: PSYC 100 or consent of instructor
This course examines how theories, principles, methods and research findings from social psychology can be applied to the understanding and solution of everyday social problems. Applications to clinical and health psychology as well as issues related to the legal system, education and the environment are examined. (Formerly PSYC 210) Addenda: This course has been changed effective spring 2012. See the Catalog Addenda section of this publication for detailed information.

PSYC 421  Psychology of Human Differences (3 credits)
Prerequisite: PSYC 100 or consent of instructor
The relative contributions of genes and environment to individual and group differences will be examined. Topics will include the description of human variability; gene/environment interactions; the heritability of cognitive abilities, personality, and psychopathology; and sex and age differences. (Formerly PSYC 321)

PSYC 426  Comparative Psychology (3 credits)
Prerequisite: PSYC 100 or consent of instructor
This course will introduce students to the use of evolutionary theory as an organizing mechanism in understanding both human and nonhuman behavior. We will examine behavior in terms of Tinbergen's four questions of nature: What is the cause of the behavior? How does the behavior develop? What is the function of the behavior? How did the behavior evolve? The course will also analyze the effects of natural selection, learning theory and cultural transmission in shaping the behavior of domestic and wild animal species. The course will culminate with a comprehensive research paper on an animal behavior topic of the student's choice.

PSYC 427  History of Psychology (3 credits)
Prerequisite: PSYC 100 and at least nine hours in psychology; or consent of instructor
This course will cover psychology's philosophical, scientific and cultural foundations. It has been said that psychology has a brief history but a long past. As such, the course begins with ancient Greek psychological theories and progresses through Hellenism, Romanism, the Middle Ages, the Renaissance, the Enlightenment, the start of scientific psychology in the late 1800s, and the subsequent explosion of specialization that lead to modern psychological thinking. Eminent thinkers and intellectual trends will be addressed, as well as the rise of science and its impact on understanding behavior and the mind. (Formerly PSYC 319)

PSYC 440  Sensation and Perception (3 credits)
Prerequisite: PSYC 100 and PSYC 242; or consent of instructor
This course explores the relationship between the nature of the environment and perceptual experience, including the sensory processes. Perceptual processes examined include spatial, pattern, and color perception, as well as our perception of time, depth and the perception of action and events. The relationship between perception, memory, cognition and behavior is investigated, with implications for our understanding of cultural differences, how we perceive personality and emotion and psychotherapeutic change. (Formerly PSYC 340)

PSYC 445  Psychology of Consciousness (3 credits)
Prerequisite: PSYC 100 and PSYC 242; or consent of instructor
Consciousness studies are revolutionizing the ways in which we understand ourselves. The phenomena of consciousness will be examined from a variety of perspectives, incorporating the most recent research from the cognitive and neurosciences to explore the evolutionary and adaptive roles of consciousness. The relevance of this material to the study of personality, emotion, memory, learning, creativity and psychopathology will be addressed. The phenomena associated with altered states, dream cognition, hypnosis, meditation, imagery and visionary states will also be examined. This course will be of interest to clinicians and educators, as well as to anyone interested in discovering more about the nature of the human mind and consciousness. (Formerly PSYC 345)

PSYC 460  Neuropsychology (3 credits)
Prerequisite: PSYC 100 and PSYC 242; or consent of instructor
This course is an introduction to neuropsychology focusing on the behavioral deficits that arise from brain pathology. This pathology includes diseases such as Alzheimer's and Parkinson's as well as other brain-related conditions such as stroke, tumors and head injury. Through this course students will learn about the history of neuropsychology, details of brain anatomy, various neuropsychological assessments, and the examination of behavioral deficits and neuropsychological profiles associated with a variety of brain disorders and/or conditions.

PSYC 465  Health Psychology (3 credits)
**Prerequisite:** PSYC 100 or consent of instructor

This course will review the critical role of behavior in health promotion and disease prevention. Theories and interventions related to health and behavior will be examined. The content of this course crosses the behavioral sciences, social sciences and medical sciences. Students will learn to conceptualize health from biological, psychological and social perspectives. Those who will benefit from this course are students seeking to understand how behavior affects health and what behavioral change strategies can be used to improve health status. *(Formerly PSYC 365)*

**PSYC 470  Clinical Psychology (3 credits)**
*Prerequisite: PSYC 100 and PSYC 360 and PSYC 370; or consent of instructor*
Survey of diagnostic and treatment procedures and resources in clinical work with children and adults; professional skills and responsibilities of the clinical psychologist. *May be taken for graduate-level credit.*

**PSYC 474  Forensic Psychology (3 credits)**
*Prerequisite: PSYC 100 and PSYC 360 and PSYC 370; or consent of instructor*
A study of basic underlying assumptions of personality theory such as intentional, nature/nurture and the knowability of man as these issues pertain to motive and bias as they manifest themselves in a judicial system. *May be taken for graduate-level credit.*

**PSYC 485  Honors Thesis I (3 credits)**
*Prerequisite: Open to Commonwealth and Departmental Honors students with consent of instructor; formal application required*
Two two-hour weekly meetings with the thesis director will culminate in an honors thesis. The honors student will normally enroll in this course during the fall semester of the senior year and complete the course during the spring semester of the senior year, earning a total of six credits. Whether the final version of the thesis qualifies the student to graduate with honors will be determined by the Department Honors Committee.

**PSYC 490  Senior Seminar (3 credits)**
*Prerequisite: PSYC 100 and 15 hours in psychology; or consent of instructor*
Topical areas of psychology will be offered to allow seniors an opportunity to engage in an extended writing project and to make individual presentations and critique each other through writing and discussion. Topics will be announced in advance. *(CWRM)*

**PSYC 493  Practicum: Peer Assisted Learning (3 credits)**
*Prerequisite: A grade of "B" or better in courses which the student will serve as a peer educator and consent of department; formal application required*
As part of the practicum, qualified students will complete the Peer Tutor Training Program offered through the Academic Achievement Center, designed to assist students in the development of the knowledge and strategies essential for serving as a peer educator. Students will also be assigned to and attend a designated class in the Department of Psychology throughout the semester. Working under faculty supervision, students will schedule, prepare and conduct study sessions for students outside of class, consistent with recognized practices, and may assume other appropriate responsibilities. Students will work with only one class per semester. This course may be taken up to four times for a maximum of 12 credits, not more than two times in the same course.

**PSYC 496  Personnel Practicum (3-15 credits)**
*Prerequisite: PSYC 100 and consent of the department; formal application required*
Direct application of psychological principles to actual personnel issues and problems in an organization such as business, industry, government, etc. Open only to seniors who wish to gain first-hand experience. Graded on a (P) Pass/(M) No Pass basis. *May be taken for graduate-level credit.*

**PSYC 497  Research (1-3 credits)**
*Prerequisite: PSYC 100 and consent of the department; formal application required*
This course includes an individual or group research project. The course is for students interested in conducting research under the supervision of faculty member or working on a faculty member's research project. May be taken for a maximum of six credits. *No more than six hours of any combination PSYC 497, PSYC 498, or PSYC 499 may be counted toward the first 33 hours in the psychology requirements for a major.*

**PSYC 498  Clinical Practicum (3-15 credits)**
*Prerequisite: PSYC 470; consent of the department; formal application required*
This practicum is open to juniors and seniors who wish to have the opportunity to gain first-hand experience in applying psychology in a clinical setting. Graded on (P) Pass/(N) No Pass basis. *No more than six hours of any combination PSYC 497, PSYC 498, or PSYC 499 may be counted toward the first 33 hours in the psychology requirements for a major.*

**PSYC 499  Directed Study in Psychology (1-3 credits)**
Prerequisite: PSYC 100; consent of the department; formal application required
Directed study is open to juniors and seniors who have demonstrated critical and analytical abilities in their studies and who wish to pursue a project independently. This course may be taken twice for a maximum of six credits. No more than six hours of any combination PSYC 497, PSYC 498, or PSYC 499 may be counted toward the first 33 hours in the psychology requirements for a major.

PSYC 500 Developmental Human Psychology (3 credits)
Prerequisite: Matriculation in graduate program in psychology or counseling; or consent of instructor
This course provides a comprehensive foundation for the study of human psychology from a developmental perspective. The scope and current thinking in each of the five cognate areas will be examined, including cognition/perception, neuropsychology, psychopathology, learning and social psychology. Current research theory, application and conceptual structure within each area will be reviewed. Considerable attention will be placed on the interface between theory and practice.

PSYC 503 Directed Study (1-3 credits)
Prerequisite: Consent of the department chairperson; formal application required
Directed study is designed for the graduate student who desires to study selected topics in a specific field. For details, consult the paragraph titled “Directed or Independent Study” in the “College of Graduate Studies” section of this catalog. This course may be repeated for a maximum of six credits.

PSYC 504 Research (1-4 credits)
Prerequisite: Consent of the department chairperson; formal application required
Original research undertaken by the graduate student in a specific field. Students initially enroll in PSYC 504 for four credits, and subsequently enroll for one credit each term thesis work continues. For details, consult the paragraph entitled “Directed or Independent Study” in the “School of Graduate Studies” section of this catalog.

PSYC 505 Research Methods and Design I (3 credits)
Prerequisite: Admission to MA in psychology program or consent of the department
This course includes two semesters of integrated statistical procedures and research design skills. Special emphasis will be placed on methodological issues that are likely to confront the graduate in applied settings. In addition to covering traditional statistical and design concepts, special applied research tools such as survey methodology, program evaluation “small-N” designs, non-parametric and multivariate models will be presented. The course will be very closely tied to the use of commonly available statistical packages such as SPSS, BMD, ALICE and STP. The course will reflect a strong experiential component including data collection, analysis and interpretation.

PSYC 506 Research Methods and Design II (3 credits)
Prerequisite: Admission to MA in psychology program or consent of the department
This course includes two semesters of integrated statistical procedures and research design skills. Special emphasis will be placed on methodological issues that are likely to confront the graduate in applied settings. In addition to covering traditional statistical and design concepts, special applied research tools such as survey methodology, program evaluation “small-N” designs, non-parametric and multivariate models will be presented. The course will be very closely tied to the use of commonly available statistical packages such as SPSS, BMD, ALICE and STP. The course will reflect a strong experiential component including data collection, analysis and interpretation.

PSYC 508 Advanced Seminar (3 credits)
Prerequisite: Admission to MA in psychology program or consent of the department
Various and special topics of current relevance in psychology, to be dealt with in depth, will be offered from time to time. Topics will be announced before pre-registration. May be taken more than once.

PSYC 509 Foundations of Clinical Practice (3 credits)
Prerequisite: Matriculation in graduate program in psychology or counseling; or consent of instructor
This course will prepare the clinician for practicum/internship training by considering the following: 1) historical overview of the profession; 2) multidimensional identity and roles of the mental health professional; 3) practice issues and issues related to federal and state legislation dealing with, for example, duty to warn, confidentiality and mandated reporting; 4) the variety of clinical settings and mental health delivery systems, including principles, theories and techniques of evaluation and management; 5) ethical and legal standards of psychological professional organizations; 6) experimental learning and the use of supervision; 7) report writing and note-keeping for clinicians; 8) self-evaluation.

PSYC 511 Theories of Psychotherapy (3 credits)
Prerequisite: Admission to MA in psychology program or consent of the department
The major counseling theories are explored in an academic and experiential format. Role-playing and videotaping of the theories are common modalities. A sampling of the theories discussed are Reality Therapy, Behavior Therapy, Rational Emotive Therapy, Gestalt Therapy, Transactional Analysis, Client Centered Therapy and the Psychoanalytic Model. (Formerly PSYC 570)
PSYC 512 Evaluation Techniques (3 credits)
Prerequisite: Admission to MA in psychology program or consent of the department
The course will begin with traditional components of psychological testing, including test construction, test development, test administration and test interpretation. Specific training will be placed on frequently administered clinical tests (e.g., MMPI, WAIS, and WISC). Beyond traditional test theory, students will be exposed to contemporary evaluation devices including behavioral assessment, interview data and naturalistic observation. (Formerly PSYC 573)

PSYC 513 Psychopharmacology for Nonmedical Professionals (3 credits)
This course examines modern drug treatment for mental disorders, including schizophrenia, mania, depression and anxiety. The types of drugs – antipsychotics, antidepressants, antianxiety and sedative-hypnotics – are discussed in conjunction with diagnostic factors, effectiveness, side effects, risk, and biological actions. Psychotherapeutic and ethical concerns are considered.

PSYC 516 Multicultural Counseling (3 credits)
Prerequisite: Admission to MA in psychology program or consent of instructor
This skill-based course will further develop the students' working knowledge and basic competency in multicultural counseling theory and application. To this end, the course will focus on the counselor on both a professional and personal level. Additionally, the course will examine salient and population specific issues related to the life experiences of the culturally "different" client and how such experiences impact on the counseling relationship and process. Underlying values and assumptions associated with widely used traditional counseling interventions and their appropriateness with non-mainstream populations will be explored. Traditional and nontraditional culturally consonant counseling approaches will also be discussed.

PSYC 517 Career Information and Placement (3 credits)
Prerequisite: Admission to MA in psychology program or consent of instructor
This course will review concepts, issues, and trends in the field of career education. It is designed to consider the role of the counselor in the career decision making process, as well as current issues in the facilitation of career decisions for women, men, couples and "minority" persons. Topics will include, but may not be limited to, selected theories of career-life planning and development; techniques designed to bring about greater awareness of needs, values, interests and abilities related to career decision-making; and a range of techniques counselors may choose to facilitate work with clients. Pre-practicum field component included.

PSYC 518 Theory and Process of Group Interaction (3 credits)
Prerequisite: Admission to MA in psychology program or consent of instructor
An examination of the theories and processes of group dynamics and their relationship to counseling philosophy. Special emphasis will be placed on the synthesis of leadership, membership, and purpose, as well as the evaluation of the appropriateness of various group counseling applications.

PSYC 520 Theories of Development (3 credits)
Prerequisite: PSYC 224; and PSYC 360 or equivalent; and consent of instructor
This course will contrast and compare the major models of development: cognitive-structural, psychoanalytic and behaviorist, with special emphasis on their a priori assumptions and research strategies. Works of Piaget, Werner, Freud, Erikson, Skinner, Spence and others will be examined.

PSYC 526 Childhood Psychopathology (3 credits)
Prerequisite: Matriculation in the MA in Psychology program or consent of instructor
The nature, etiology, consequences and prevention of the major emotional disorders of children, considered from a developmental viewpoint. Areas include emotional problems of normal children as well as serious psychopathology. Primary emphasis is on psychological factors responsible for deviance. Some attention to organic and constitutional factors.

PSYC 541 Psychotherapy: Theory and Practice I (3 credits)
Prerequisite: Matriculation in MA program in psychology or consent of instructor
This course is designed for graduate students in clinical psychology who are interested in developing effective therapeutic techniques for working with older adolescents and adults. The course will examine psychopathology from a developmental perspective. From this model, various approaches (humanistic, behavioral, cognitive and psychodynamic) to therapy will be applied and evaluated. No preferred treatment modality will be espoused, rather, students will be expected to make use of a combination of techniques and integrate various forms of psychotherapy. Moreover, contextual factors related to diversity will be integrated throughout the course.

PSYC 542 Psychotherapy: Theory and Practice II (3 credits)
Prerequisite: Matriculation in MA program in psychology or consent of instructor
This course is designed for graduate students in clinical psychology who are interested in developing effective therapeutic techniques for working with young children and early adolescents. The course will examine child psychopathology from a developmental perspective. From this model, various approaches (humanistic, behavioral, cognitive and psychodynamic) to child therapy will be applied and evaluated.
No preferred treatment modality will be espoused, rather students will be expected to make use of a combination of techniques and integrate various forms of psychotherapy. Moreover, contextual factors related to diversity will be integrated throughout the course.

**PSYC 543  Marital and Family Therapy (3 credits)**
*Prerequisite: Matriculation in MA program in psychology or consent of instructor*
This course is an examination of the treatment strategies for marital and family systems. Attention will be given to: 1) history and development of marital and family therapy, 2) current schools of therapy, 3) strategies of intervention, 4) the role of the therapist in marital and family work, 5) professional standards for marital and family therapy.

**PSYC 575  Psychopathology (3 credits)**
*Prerequisite: Matriculation in psychology MA program or consent of instructor*
An examination of the classification, symptoms and treatment of the types of psychopathology listed in the DSM III-R or its revisions. Special focus will be given to differential diagnosis issues and intervention strategies.

**PSYC 580  Trauma and Loss (3 credits)**
*Prerequisite: PSYC 500 and PSYC 509 and PSYC 511 and PSYC 541; or consent of instructor*
This course explores issues related to human suffering which can halt, derail, alter and challenge the process of personality development. Building upon earlier courses, advanced graduate students will work to integrate how specific developmental challenges impact identity-formation and relate to the process of psychotherapy. A variety of approaches will be used to understand treatment with traumatized or bereaved persons; processes of vicarious traumatization and its prevention are also explored. Psychological understanding of the symptoms and treatment of these issues will be examined through clinical and developmental theory, case summaries and current research. Students will examine how these texts relate to their clinical experiences of trauma and loss in order to further develop professional skills. Offered spring semester.

**PSYC 591  Clinical Practicum (3 credits)**
*Prerequisite: Both the completion of the first year coursework (PSYC 505, PSYC 506, PSYC 509, PSYC 511, PSYC 512, PSYC 575) and the approval of the Psychology Graduate Committee*
The Clinical Practicum will prepare students to work in mental health settings, providing opportunities to observe and assist under supervision. 100 hours required, including a minimum of 40 hours direct service work; 10 hours of individual supervision; and 20 hours of group supervision. One cr/sem: complete in two semesters, 50 hrs/sem, working 3.5 hrs/wk. Two crs: complete in one semester, for 100 hours, working 7 hrs/wk. May be taken more than once but must total minimum of 100 hours (2 crs).

**PSYC 592  Internship (3-6 credits)**
*Prerequisite: PSYC 591 and matriculation in MA program in psychology; consent of department; formal application required*
The internship will allow students to apply the skills acquired through classroom and practicum work. Students will be placed in mental health settings and will receive extensive supervision. Required 600 hours, including a minimum of 240 hours direct service work, 15 hours of individual supervision, and 30 hours of group supervision. It may not be taken for more than six credit hours in a single semester. Once begun, the internship must be taken in consecutive semesters. May be completed in two semesters (six credits each semester) for 300 hours each semester, working 20 hours each week, or completed in four semesters (three credits each semester) for 150 hours each semester, working 10 hours each week. Must be taken more than once and must total a minimum of 600 hours (12 credits).

**Psychology: Other Approved Courses**

**PSYC 211  Research Methods I**
**PSYC 212  Research Methods II**

**PSYC 519  The Facilitation of Group Experience (3 credits)**
*Prerequisite: CNGC 538 or consent of instructor*
An introduction to the concepts and practices of facilitating various types of group experiences. A number of leadership methods will be presented, and each participant will experience a leadership role under controlled circumstances.

**PSYC 525  Cognitive Development (3 credits)**
*Prerequisite: PSYC 224 or equivalent; and consent of instructor*
The development of the cognitive processes, including perception, language, intelligence and memory. Throughout the life cycle, the major focus will be on the growth of basic systems and strategies for representing information symbolically. The work of cognitive theories such as Berlyne, Bruner and Piaget will be considered.
• READING

READ 503  Directed Study (1-3 credits)
Directed study is designed for the graduate student who desires to study selected topics in a specific field. For details, consult the paragraph titled “Directed or Independent Study” in the “College of Graduate Studies” section of this catalog. This course may be repeated for a maximum of six credits.

READ 540  Early Childhood Literacy Instruction (3 credits)
Intended as a content area graduate course in reading for the early childhood educator, this course features many instructional practices that promote language, literacy and learning in the young learner. In a review of current research, teachers learn and apply identified “best practices” in listening, speaking, reading, writing, viewing and producing. Topics include assessment, word analysis, vocabulary, narrative and expository text structures, guided reading and writing, comprehension strategies and study skills. Through an understanding of theories that support best practices, educators develop specific strategies for observing and supporting young learners as they become successful, independent, and thoughtful readers and writers. Spring, summer session II and fall.

READ 541  Elementary School Literacy Instruction (3 credits)
Intended as a content area graduate course in reading for the elementary school educator, this course features many instructional practices that promote language, literacy and learning in the developing literate. In a review of current research, teachers learn and apply identified “best practices” in listening, speaking, reading, writing, viewing and producing. Topics include assessment, word analysis, vocabulary, narrative and expository text structures, guided reading and writing, comprehension strategies and study skills. Through an understanding of theories that support best practices, educators develop specific strategies for observing and supporting students as they become successful, independent and thoughtful readers and writers. Spring, summer session II and fall.

READ 545  Global Literacies: Discovering the World in the Elementary Classroom (3 credits)
Master's candidates who are practicing teachers continue to prepare for their role in the Massachusetts classroom by considering, examining, practicing and planning for effective teaching and learning environments. Through the application of an inquiry-based, cross-curricular approach to literacy instruction, they will discover that the human world can be a central feature of the language arts plan. The course is designed to provide practical approaches, materials and plans for engaging children in the discovery of the nature of the planet earth, the nature of human beings as a species and the nature of global social structures, all in the context of the immediate world in their neighborhood.

READ 546  New Literacies for Internet Comprehension (3 credits)
Prerequisites: Access to a personal computer/laptop with printer and regular access to Internet connection, browsing capability and e-mail. May not be audited. Please see the Bridgewater State University Web site for information about Web and Web-based courses. This course seeks to qualify educators in preparing youth for the challenges of reading comprehension in an age of online information through research-based instruction and Web inquiry. Leu, Kinzer, Coiro, and Cammack (2004) identify these five skills as asking questions, locating information, critically evaluating information, synthesizing information and communicating information. “New literacies” is the term referred to as these reading comprehension skills require novel strategies on the Internet and take a new literacies theoretical perspective. Educators develop an in-depth understanding of the role of the Internet in literacy development and the impact of the historical connections between literacy, learning, technology and culture.

READ 547  Teaching English Learners to Read and Write (3 credits)
In this course, educators will learn an effective framework regarding the levels of language development in listening, speaking, reading and writing for English learners. Educators will acquire effective strategies for creating conditions that support students’ first languages and in becoming proficiently literate in their first and subsequent languages. Educators will learn to develop culturally and developmentally responsive approaches to teaching English learners to read and write, with specific attention to assessment and instructional planning, the relationship between speech and print, word identification and vocabulary, beginning reading and writing practices and content area reading/writing/technology connections.

READ 548  Case Studies in Dual Language Instruction: Theory and Practice (3 credits)
Population and demographic changes in the United States in recent decades have resulted in a dramatic increase in student populations whose learning needs would be best met in a multilingual learning environment. Classroom teachers in this course prepare for their role in meeting the needs of an increasing population of second and third language pupils in the Commonwealth of Massachusetts. This course is designed to provide a direct, concrete, case-study learning experience in the lives of at least two families inhabiting such multilingual life worlds. This course is also designed to offer a comprehensive theoretical foundation in the history and conceptual frameworks related to second language instruction in the United States.

READ 549  Reading in the Content Areas (3 credits)
In a workshop format, educators use their own textbooks to develop exercises that aid their students in comprehending expository text. Direct and indirect strategies for teaching vocabulary, reading processes, skill acquisition, study guides and levels of questioning are analyzed and utilized as they apply to different content material. May not be audited. Includes 25 hours of fieldwork.

READ 550 Improving Literacy Instruction (3 credits)
Literacy educators are introduced to the subject matter that constitutes effective literacy instruction (all levels). They examine classroom practices that are consistent with the socio-psycho-linguistic theories of learning and develop a knowledge base of literacy instruction that benefits students’ comprehension and expression of a variety of texts. May not be audited. Includes 25 hours of fieldwork.

READ 551 Case Studies in Literacy Acquisition and Development (3 credits)
Through case studies, literacy educators develop an understanding of first and second language acquisition and development. Knowledge of sociocultural, psychological, linguistic and cognitive functions that impact reading and writing processes provides the foundation for individual and group instruction and assessment. May not be audited. Includes 25 hours of fieldwork. Spring semester and summer II.

READ 552 Literacy Assessment Principles and Techniques (3 credits)
Prerequisite: READ 551 and matriculation in the MEd in Reading; or consent of program coordinator
Literacy educators use observation techniques and formal and informal diagnostic procedures to measure and monitor students’ literacy processes and behaviors. They analyze assessment data and recommend a model of diagnostic instruction that addresses students’ strengths and weaknesses. The resulting report is made available to parents and allied professionals. May not be audited. Includes 25 hours of fieldwork. Spring semester and summer II.

READ 553 Issues in Literacy Education for Social Justice (3 credits)
Prerequisite: READ 550 and matriculation in the MEd in Reading; or consent of program coordinator
In a context of rapidly changing demographics, economies and technologies, literacy educators prepare to lead in matters of curriculum and instruction for the 21st century. Through extensive reading, writing, research, discussion and debate, they advance their thinking in a range of complex political and educational issues which impact the local, national and global communities. May not be audited. Includes 25 hours of fieldwork. Spring semester and summer II.

READ 554 Research in Literacy Teaching and Learning (3 credits)
Prerequisite: Matriculation in the MEd in Reading; or consent of program coordinator
Literacy educators explore numerous research traditions and methods, including ethnographic, descriptive, correlational, experimental and multivariate. They develop a research project that demonstrates a fundamental understanding of the methodology, data collection procedures and analysis techniques that are central to a range of research, assessment and instructional perspectives and policy work. May not be audited. Includes 25 hours of fieldwork. Fall semester and summer II.

READ 555 Supervision and Administration of Literacy Programs (3 credits)
Prerequisite: READ 550 and READ 552 and matriculation in the MEd in Reading; or consent of program coordinator
In order to develop a more literate environment, literacy educators draw on their professional knowledge base and state and national standards to assess a school-wide literacy program, analyze assessment data, develop a literacy plan, and provide a variety of opportunities for professional development and parental support. This firmly establishes them in the role as mentor and coach. May not be audited. Includes 25 hours of fieldwork. Fall semester.

READ 556 Literacy Curriculum Development and Implementation (3 credits)
Prerequisite: READ 550 and matriculation in the MEd in Reading; or consent of program coordinator
Literacy educators consider current and historical perspectives in examining various curriculum models. This forms the basis for evaluating a local curriculum and examining the research foundations for state frameworks. May not be audited. Includes 25 hours of fieldwork. Spring semester.

READ 558 Practicum Experience I for the Reading Specialist (3 credits)
Prerequisite: READ 550 and READ 551 and READ 552 and READ 553 and READ 554 and READ 555 and READ 556; application approved by adviser, field placement supervisor, program coordinator and dean of College of Education and Allied Studies and evidence of one of the following: (a) an active MA DESE licensure as Reading Specialist or (b) a passing score on the Massachusetts Tests for Educator Licensure® (MTEL) for Reading Specialist (08)
Literacy educators assume the role of reading specialists and English Language Arts (ELA) curriculum leaders in working with students, teachers and the entire school community in a supervised 200-hour field experience. READ 558 and READ 559 are taken consecutively and considered to be a yearlong supervised 400-hour field experience. Spring and fall semesters.

READ 559 Practicum Experience II for the Reading Specialist (3 credits)
Prerequisites: READ 558 and application approved by adviser, field placement supervisor, program coordinator, dean of College of Education and Allied Studies
Literacy educators extend and enhance their work as reading specialists and ELA curriculum leaders in working in a supervised 200-hour field experience. In addition to required course work, READ 558 and READ 559 are required in order to receive college endorsement for licensure with the Massachusetts Department of Elementary and Secondary Education as Reading Specialist (all levels). May not be audited. Includes 200 hours fieldwork. Spring and fall semesters.

READ 560  Literacy Research Seminar (3 credits)
Prerequisites: READ 552 and READ 553 and READ 554 and READ 556; and evidence of one of the following: a) an active MA DESE licensure as reading specialist or b) a passing score on the Massachusetts Test for Educator Licensure® (MTEL) for Reading Specialist (08)
Literacy educators examine, review, analyze and reflect upon their academic and professional development. They conduct and report on an in-depth, systematic investigation of literacy programs and practices. READ 560 is a yearlong companion course to READ 558 and READ 559. May not be audited.

READ 570 - Special Topics in Literacy Education
(1-4 credits)
Prerequisite: Course prerequisite may be specified depending on the nature of the topic
Special topics of current relevance in literacy education will be offered. The topic to be addressed will be announced prior to registration. May not be audited. May be taken more than once.

READ 650  Research in Literacy Curriculum and Instruction (3 credits)
Prerequisite: Matriculation in CAGS in Reading; course restricted to cohort members
As consumers of educational research, literacy educators develop a knowledge base of varied research methodologies. As producers of educational research, they select a topic, conduct a review of literature related to their topic, design a research procedure and submit a research proposal for approval. Includes 25 hours of fieldwork.

READ 651  Socio-Psycholinguistics and Critical Literacy (3 credits)
Prerequisite: Matriculation in CAGS in Reading; course restricted to cohort members
A review of reading instruction in the United States gives literacy educators a historical perspective for understanding the work of researchers, teachers and curriculum developers in responding to rapidly changing materials, media forms and technologies. They examine theoretical processes and models of reading and writing to develop an in-depth understanding of socio-psycholinguistic and critical theories of language, literacy and learning. Includes 25 hours of fieldwork.

READ 652  Cultural Foundations of Literacy (3 credits)
Prerequisite: Matriculation in CAGS in Reading; course restricted to cohort members
Literacy educators develop a cognitive framework and consciousness for the complexities of the literacy event as it is shaped by social, cultural and political functions of language and literacy learning. They examine models of language processes as heuristic devices for generating theories of linguistic behaviors in our local and global societies. Includes 25 hours of fieldwork.

READ 653  Diagnosis, Assessment, and Evaluation of Student Performance and Program Effectiveness (3 credits)
Prerequisite: Matriculation in CAGS in Reading; course restricted to cohort members
Literacy educators learn and practice diagnostic, decision-making procedures for informing literacy curriculum and instruction for individuals and groups. The diagnostic process guides the literacy specialist in gathering and integrating background information, previous and current data as well as ancillary information pertinent to more individualized forms of clinical instruction (as needed) and to more effective group practices in the N-12 spectrum. Includes 25 hours of fieldwork.

READ 654  Principles and Programs in Professional Development (3 credits)
Prerequisite: Matriculation in CAGS in Reading; course restricted to cohort members
Through data-driven supervision and administration of reading and literacy programs, literacy educators examine and reflect upon their roles as professional leaders and agents of change in their schools and communities. Guided by a thorough knowledge of socio-psycholinguistic and critical theories and of the demand for raising professional standards, they cultivate leadership in collegial partnerships and relationships by creating a more literate environment and engaging in more effective learning and teaching practices. Includes 25 hours of fieldwork.

READ 655  Case Studies in N-12 Literacy Curriculum and Instruction (3 credits)
Prerequisite: Matriculation in CAGS in Reading; course restricted to cohort members
Literacy educators engage in N-12 district case studies. They use a variety of techniques to assess and evaluate the effectiveness of the existing language arts curriculum. Through related initiatives, they develop a well-documented report of program strengths and needs and make specific standards-based recommendations for the implementation of more effective literacy curriculum, instruction and assessment. Includes 25 hours of fieldwork.
READ 670  Seminar for Advanced Studies in Literacy (3 credits)
Prerequisite: Course restricted to cohort members
Literacy educators develop a foundation for curriculum leadership in language, literacy and learning. They examine and explore educational values and trends and create a vision for literacy education at all levels. Through this process, they identify an area of instructional practice for additional research. Includes 25 hours of fieldwork.

READ 680  Research Project in Exemplary Literacy Practice (3 credits)
Prerequisite: Consent of program coordinator; formal application required
Working with a faculty member from the graduate programs in reading, the candidate for the Certificate of Advanced Graduate Study (CAGS) in Reading will refine a research proposal developed in READ 650: Research in Literacy Curriculum and Instruction, conduct a research study, analyze and interpret data gathered from the study, draw conclusions and make recommendations. The CAGS in Reading candidate will refine a Web site developed in INST 552 Multimedia for Educators, which includes all aspects of this research project, and will present and defend this research project and Web site at a CAGS Research Project Defense Presentation. This course is graded on a (P)/Pass/(N) No Pass basis.

READ 681  CAGS Literacy Practicum (6 credits)
Prerequisite: For those not already holding a MA DESE license as a Reading Specialist: a passing score on the Massachusetts Test for Educator Licensure® (MTEL) for Reading Specialist (08); and READ 650 and READ 651 and READ 652 and READ 653 and READ 654 and READ 655 and READ 670; and INST 551 or approved course substitution; and an application approved by adviser, field placement supervisor, program coordinator and dean of the College of Education and Allied Studies; course restricted to cohort members
In this culminating experience, literacy educators provide leadership through the administration and supervision of language and literacy programs. They implement the approved research project proposed in READ 650. The implementation, documentation and resulting multimedia electronic thesis combine evidence of a successful practicum experience. Includes 25 hours of fieldwork.

READ 682  CAGS Literacy Practicum (1 credit)
Prerequisite: Approval of program coordinator; course restricted to cohort members
This course is required of candidates who have not completed and/or successfully defended their project and electronic thesis in the preceding semester. Such candidates will register for READ 682 each semester thereafter (fall and spring) until the project has been completed. Course is graded on a (P) Pass/(N) No Pass basis.

RECREATION

RECR 199  First Year Seminar (3 credits)
Prerequisite: Open to all freshmen with a writing placement score of 3 or above or a SAT score of 500 or above or who have completed ENGL 101. Students with 24 or more transfer credits will have this requirement waived.
First Year Seminars (FYS) are writing-intensive, topic courses that introduce students to academic thought, discourse and practices. FYS courses prepare and orient students toward productive and fulfilling college careers by actively engaging them in a specific academic area of interest. Students will improve their writing, reading, research and basic information and technology skills while learning to work both collaboratively and independently. These courses will fulfill the First Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one FYS course may be taken for credit. (CFYS)

RECR 230  Introduction to Recreation (3 credits)
The history of recreation from primitive human to the present. Philosophies of recreation, leisure, work and play are presented. Recreation services and career opportunities are discussed. Professional organizations and literature are reviewed. Offered fall semester.

RECR 298  Second Year Seminar (Speaking Intensive) (3 credits)
Prerequisite: 199; Open to all sophomores and juniors who have completed ENGL 101, and the speaking skills requirement. Students with 54 or more transfer credits will have this requirement waived. Cannot be taken if 299 is taken for credit.
Second Year Seminars (SYS) are speaking-intensive, topic courses that build on the academic skills and habits introduced in the First Year Seminar. SYS courses engage students in a specific academic area of interest and provide them with the opportunity to reinforce, share and interpret knowledge. Students will improve their speaking, reading, research and basic information and technology skills while building the connections between scholarship and action that are required for lifelong learning. These courses will fulfill the Second Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one SYS course may be taken for credit. (CSYS)

RECR 299  Second Year Seminar (Writing Intensive) (3 credits)
Prerequisite: _ _ _ _ 199; Open to all sophomores and juniors who have completed ENGL 101 and ENGL 102. Students with 54 or more transfer credits will have this requirement waived. Cannot be taken if _ _ _ _ 298 is taken for credit.

Second Year Seminars (SYS) are writing-intensive, topic courses that build on the academic skills and habits introduced in the First Year Seminar. SYS courses engage students in a specific academic area of interest and provide them with the opportunity to reinforce, share and interpret knowledge. Students will improve their writing, reading, research and basic information and technology skills while building the connections between scholarship and action that are required for lifelong learning. These courses will fulfill the Second Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one SYS course may be taken for credit. (CSYS)

RECR 324 Recreation for Individuals with Disabilities (4 credits)
This course will address etiology, treatment, and functional physical, motor, and behavioral skills of individuals with disabilities. In addition, the course will explore accessible recreational facilities as well as a variety of activity settings, ranging from most restrictive to full inclusion. Special emphasis will be given to individuals with sensory impairments, limited intellectual capacity, neuromuscular disorders, chronic health conditions and unique needs among aging populations. Laboratory experiences will include an exploration of program delivery systems and services. Two hours of lecture and one two-hour laboratory weekly.

RECR 330 Theory and Principles of Leisure (3 credits)
A course designed to provide the student an opportunity to explore the impact of leisure on society and the individual. Economic, educational, social and psychological phenomena and the force each has on leisure are examined. Offered alternate years.

RECR 331 Outdoor Recreation Resources (3 credits)
Prerequisite: RECR 230
Study of the design, effective use, management and programs of outdoor recreation and conservation areas. Offered alternate years.

RECR 332 Leadership and the Group Process (3 credits)
Prerequisite: RECR 230 which may be taken concurrently
This course provides theory and experiences necessary to develop an understanding of leadership, group dynamics and effective group skills. Offered fall semester.

RECR 461 Organization and Administration in Recreation (3 credits)
Prerequisite: RECR 230
Organization and administration of recreation at public, private and commercial agencies are examined. Planning, organizing, directing, controlling and evaluating leisure services are included. Offered spring semester. May be taken for graduate-level credit.

RECR 462 Programming for Recreation and Leisure (3 credits)
Prerequisite: RECR 230
The opportunity to plan, conduct, evaluate and observe a wide variety of both on-campus and community-based programs and activities. Offered spring semester. May be taken for graduate-level credit.

RECR 463 Current Issues in Recreation and Leisure Service (3 credits)
This course will provide for the study of selected current issues and changing trends in recreation and leisure service. May be taken for graduate-level credit.

RECR 475 Games Leadership Workshop (3 credits)
This workshop is designed for people interested in building relationships through play in games. The games emphasis will move away from the familiar competitive play experience to the non-competitive, supportive and cooperative play experience. Participants will develop a repertoire of games suitable for all ages. Leadership competence will provide participants with the tools to take games to others in schools, business, community groups and the family. Offered alternate years. May be taken for graduate-level credit.

RECR 498 Field Experience in Recreation (3-15 credits)
Prerequisite: Consent of the department; formal application required
A field experience offers qualified students the opportunity to gain practical experience in their field of study. Placements are made in both public and private agencies and are designed to complement the student's theoretical study. This course may be repeated for a maximum of 15 credits.

RECR 499 Directed Study in Recreation (1-3 credits)
Prerequisite: Consent of the department; formal application required
Directed study is open to all juniors and seniors who have demonstrated critical and analytical abilities in their studies and who wish to pursue a project independently. This course may be taken twice for a maximum of six credits. Offered either semester.

Recreation: Other Approved Courses

RECR 333 Camp Leadership and Organized Camping (3 credits)
A study of organized camps and camping programs with particular emphasis on program planning, selection and training of staff and administrative details in organized camping. Offered alternate years.

RUSSIAN

LARU 101 Elementary Russian I (3 credits)
An introduction to elementary syntactic, semantic, phonetic and paralinguistic structures is offered. Pertinent everyday cultural concepts are discussed. Relevant comparison and contrast with the native language is treated. Functional communication in the second language in a controlled environment is the principal objective of the course. Note: See the “Departmental Foreign Language Policy” in the “Foreign Languages” section of this catalog. (CGCL; CHUM)

LARU 102 Elementary Russian II (3 credits)
Prerequisite: LARU 101; or see the “Departmental Foreign Language Policy” in the “Foreign Languages” section of this catalog
The further study of elementary syntactic, semantic, phonetic and paralinguistic structures is offered. Pertinent everyday cultural concepts are discussed. Relevant comparison and contrast with the native language is treated. Functional communication in the second language in a controlled environment is the principal objective of the course. (CGCL; CHUM)

LARU 199 First Year Seminar (3 credits)
Prerequisite: Open to all freshmen with a writing placement score of 3 or above or a SAT score of 500 or above. Students with 24 or more transfer credits will have this requirement waived.
First Year Seminars (FYS) are writing-intensive, topic courses that introduce students to academic thought, discourse and practices. FYS courses prepare and orient students toward productive and fulfilling college careers by actively engaging them in a specific academic area of interest. Students will improve their writing, reading, research and basic information and technology skills while learning to work both collaboratively and independently. These courses will fulfill the First Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one FYS course may be taken for credit. (CFYS)

LARU 298 Second Year Seminar (Speaking Intensive) (3 credits)
Prerequisite: LARU 199; Open to all sophomores and juniors who have completed ENGL 101, and the speaking skills requirement. Students with 54 or more transfer credits will have this requirement waived. Cannot be taken if LARU 299 is taken for credit.
Second Year Seminars (SYS) are speaking-intensive, topic courses that build on the academic skills and habits introduced in the First Year Seminar. SYS courses engage students in a specific academic area of interest and provide them with the opportunity to reinforce, share and interpret knowledge. Students will improve their speaking, reading, research and basic information and technology skills while building the connections between scholarship and action that are required for lifelong learning. These courses will fulfill the Second Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one SYS course may be taken for credit. (CSYS)

LARU 299 Second Year Seminar (Writing Intensive) (3 credits)
Prerequisite: LARU 199; Open to all sophomores and juniors who have completed ENGL 101 and ENGL 102. Students with 54 or more transfer credits will have this requirement waived. Cannot be taken if LARU 298 is taken for credit.
Second Year Seminars (SYS) are writing-intensive, topic courses that build on the academic skills and habits introduced in the First Year Seminar. SYS courses engage students in a specific academic area of interest and provide them with the opportunity to reinforce, share and interpret knowledge. Students will improve their writing, reading, research and basic information and technology skills while building the connections between scholarship and action that are required for lifelong learning. These courses will fulfill the Second Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one SYS course may be taken for credit. (CSYS)

Russian: Other Approved Courses
LARU 151 Intermediate Russian I
LARU 152 Intermediate Russian II

**SCIENCE - GENERAL**

GSCI 507 Topics in Technology/Engineering for the Middle School Teacher (3 credits)
Prerequisite: GSCI 501
This course is part of the MAT in General Science program. This course presents selected areas of Middle School level (grades 5-8) Technology/Engineering as determined by the requirements of the Massachusetts Curriculum Framework in Science and Technology/Engineering. Possible topics include the design process, impact of technology on nature, future technologies, tools and machines of technology, resources and technology in communication, transportation and power.

GSCI 560 Special Topics in Science Teaching (1-3 credits)
This course uses the content-rich problem-based integrated science approach and covers special topics of current relevance in science education. This course will weave science standards and instructional strategies with the science content. The topic to be addressed will be announced prior to registration. The course may be repeated for different topics.

Science - General: Other Approved Courses

GSCI 501 - Problem Solving in Science for the Middle School Teacher
GSCI 504 - Topics in Life Sciences for the Middle School Teacher
GSCI 505 - Topics in Physical Sciences for the Middle School Teacher
GSCI 506 - Topics in Earth/Space Sciences for the Middle School Teacher
GSCI 508 - Integrated Science for the Middle School Teacher

**SCIENCE - NATURAL**

NSCI 199 First Year Seminar (3 credits)
Prerequisite: Open to all freshmen with a writing placement score of 3 or above or a SAT score of 500 or above or who have completed ENGL 101. Students with 24 or more transfer credits will have this requirement waived.
First Year Seminars (FYS) are writing-intensive, topic courses that introduce students to academic thought, discourse and practices. FYS courses prepare and orient students toward productive and fulfilling college careers by actively engaging them in a specific academic area of interest. Students will improve their writing, reading, research and basic information and technology skills while learning to work both collaboratively and independently. These courses will fulfill the First Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one FYS course may be taken for credit. (CFYS)

NSCI 298 Second Year Seminar (Speaking Intensive) (3 credits)
Prerequisite: _ _ _ _ 199; Open to all sophomores and juniors who have completed ENGL 101, and the speaking skills requirement. Students with 54 or more transfer credits will have this requirement waived. Cannot be taken if _ _ _ _ 299 is taken for credit.
Second Year Seminars (SYS) are speaking-intensive, topic courses that build on the academic skills and habits introduced in the First Year Seminar. SYS courses engage students in a specific academic area of interest and provide them with the opportunity to reinforce, share and interpret knowledge. Students will improve their speaking, reading, research and basic information and technology skills while building the connections between scholarship and action that are required for lifelong learning. These courses will fulfill the Second Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one SYS course may be taken for credit. (CSYS)

NSCI 299 Second Year Seminar (Writing Intensive) (3 credits)
Prerequisite: _ _ _ _ 199; Open to all sophomores and juniors who have completed ENGL 101 and ENGL 102. Students with 54 or more transfer credits will have this requirement waived. Cannot be taken if _ _ _ _ 298 is taken for credit.
Second Year Seminars (SYS) are writing-intensive, topic courses that build on the academic skills and habits introduced in the First Year Seminar. SYS courses engage students in a specific academic area of interest and provide them with the opportunity to reinforce, share
and interpret knowledge. Students will improve their writing, reading, research and basic information and technology skills while building the connections between scholarship and action that are required for lifelong learning. These courses will fulfill the Second Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one SYS course may be taken for credit. (CSYS)

**NSCI 503 Directed Study (1-3 credits)**
Prerequisite: Consent of the department chairperson; formal application required
Directed study is designed for the graduate student who desires to study selected topics in a specific field. For details, consult the paragraph titled “Directed or Independent Study” in the “School of Graduate Studies” section of this catalog. This course may be repeated for a maximum of six credits.

**NSCI 521 Watersheds: Stream Ecology, Water Quality and Land Use (4 or 6 credits)**
Prerequisite: A course in ecology or environmental science and one course in either chemistry, earth science or geography
Part I, spring semester workshops two weeks in Summer Session II; Part II, fall semester workshops and/or watershed project. This is an interdisciplinary course primarily for teacher professional development in stream ecology, water quality and land use impacts in local watersheds. The RiverNet Watershed Access Lab will be used to advance local community watershed initiatives that improve water quality and protect watershed resources. Workshops and projects will emphasize hands-on training in stream ecology, aquatic insect identification, water quality assessments and the use of Massachusetts GIS (Geographic Information Systems). The project goal will be to evaluate land use impacts on the water quality of a stream or river in the local community of each team. A local watershed initiative project will be developed by each participant and presented in a Watershed Access Lab one-day conference. Four credits require Saturday workshops, eight-day summer institute and a one-semester watershed project presented at the WAL Conference. Six credits require Saturday workshops, eight-day summer institute and summer research project report, and an academic year watershed project presented at the WAL Conference. Spring, summer II and fall.

**NSCI 522 Watershed Analysis: Topics and Techniques (1-3 credits)**
Prerequisite: NSCI 521 or consent of instructor
Designed primarily for watershed educators and secondary teachers to develop in-depth skills in watershed studies, this course allows for various specialized offerings as short courses of one or two credits. Short course topics will address specific issues and techniques pertaining to watershed studies that will also serve the continuing needs of teachers and watershed educators for professional development. Potential topics could include using Massachusetts GIS for watershed land use analysis, techniques for biomonitoring and historical geographic analysis of watershed land use. This course may be repeated with different topics for a total of three credits.

**Science - Natural: Other Approved Courses**

**NSCI 300 Science and the Impact of Technology (3 credits)**
A study of the interplay of science and technology, the environmental, social and economic consequences of technology, the effect of technical change on society, the management and control of technology and the nature of the technological decision-making process.

**NSCI 400 Senior Interdisciplinary Seminar in Environmental Science (3 credits)**
Prerequisite: An introductory course in environmental science or consent of instructor
Current environmental issues will be discussed and analyzed in detail from an interdisciplinary viewpoint. The importance of thorough analysis and planning in developing long-term solutions to environmental problems will be emphasized. Faculty with appropriate interdisciplinary backgrounds will participate.

**NSCI 511 Principles of Hydrology and Remote Sensing for Investigating Land Use Impacts on Water Resources (3 credits)**
Prerequisite: One course in either chemistry, earth science or geography and a course on computer applications; or consent of instructor
This is an interdisciplinary course on hydrology and land use assessment designed primarily for professional development of watershed educators working on projects in local watersheds. The RiverNet Watershed Access Lab will be used for projects that emphasize hands-on training in hydrology, determining water-shed area, and assessment of land use through color I.R. photos and satellite image analysis. The project goal will be to evaluate land use impacts on water quality in the local community. Summer session I.

**NSCI 514 Scientific Telecommunications**

**NSCI 525 Mathematical Applications to the Natural Sciences (3 credits)**
Prerequisite: High school/middle school teacher of mathematics or sciences
A series of lessons will be offered in which the application of mathematics to various areas of science will be offered. Guest speakers will present material from their area of expertise. Demonstrations of classroom presentation of the material will be given.
**SCIENCE - PHYSICAL**

**PHSC 501  Problem Solving in Physical Science (3 credits)**
This is the introductory course for the MAT in Physical Science Program. This course uses a content-rich, problem-based approach. The course will introduce the process and culture of teaching physical science. This course will weave the Curriculum Frameworks and MCAS expectations with instructional strategies. Students will be introduced to resources for teaching physical science.

**Science  Physical: Other Approved Courses**

PHSC 503 - Directed Study  
PHSC 590 - Integrated Physical Science

**SOCIAL WORK**

**SCWK 199  First Year Seminar (3 credits)**
*Prerequisite: Open to all freshmen with a writing placement score of 3 or above or a SAT score of 500 or above. Students with 24 or more transfer credits will have this requirement waived. First Year Seminars (FYS) are writing-intensive, topic courses that introduce students to academic thought, discourse and practices. FYS courses prepare and orient students toward productive and fulfilling college careers by actively engaging them in a specific academic area of interest. Students will improve their writing, reading, research and basic information and technology skills while learning to work both collaboratively and independently. These courses will fulfill the First Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one FYS course may be taken for credit. (CFYS)*

**SCWK 250  Introduction to Social Welfare (3 credits)**
*Prerequisite: PSYC 100 or SOCI 102  
This course includes the analysis of the conceptions of social welfare, the historical development and function of social welfare and the value systems underlying the political, economic and social response to human needs. It offers an overview of the roles of the social worker and the varied settings in which interventions are employed. Includes a 30-hour service-learning experience. Either semester. (CSOC)*

**SCWK 270  Social Work Issues of Diversity and Oppression (3 credits)**
This course introduces students to the concepts of diversity and oppression from a social work perspective. It provides the opportunity to define (and deconstruct), discuss and examine critically the phenomena of race, ethnicity, gender, culture, difference, power, pluralism, oppression, multiculturalism, social justice, empowerment, assimilation and social identity. It looks at various ethnic, racial, cultural and sociological populations from the perspectives of their history, identity, status, strengths, challenges, needs, power and context. (CMCL; CSOC)

**SCWK 298  Second Year Seminar (Speaking Intensive) (3 credits)**
*Prerequisite: Open to all sophomores and juniors who have completed ENGL 101, and the speaking skills requirement. Students with 54 or more transfer credits will have this requirement waived. Cannot be taken if 299 is taken for credit. Second Year Seminars (SYS) are speaking-intensive, topic courses that build on the academic skills and habits introduced in the First Year Seminar. SYS courses engage students in a specific academic area of interest and provide them with the opportunity to reinforce, share and interpret knowledge. Students will improve their speaking, reading, research and basic information and technology skills while building the connections between scholarship and action that are required for lifelong learning. These courses will fulfill the Second Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one SYS course may be taken for credit. (CSYS)*

**SCWK 299  Second Year Seminar (Writing Intensive) (3 credits)**
*Prerequisite: Open to all sophomores and juniors who have completed ENGL 101 and ENGL 102. Students with 54 or more transfer credits will have this requirement waived. Cannot be taken if 298 is taken for credit. Second Year Seminars (SYS) are writing-intensive, topic courses that build on the academic skills and habits introduced in the First Year Seminar. SYS courses engage students in a specific academic area of interest and provide them with the opportunity to reinforce, share and interpret knowledge. Students will improve their writing, reading, research and basic information and technology skills while building the connections between scholarship and action that are required for lifelong learning. These courses will fulfill the Second Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one SYS course may be taken for credit. (CSYS)*
SCWK 304  The Psychosocial Development of Women (3 credits)
Cross Listed with WMST 304
This course will provide an introduction to "women's reality" in terms of current research on women's values and needs. The course will cover such topics as power and conflict, sexuality and intimacy, creativity, ethnicity and the effects of oppression as well as the emotional problems that appear to affect women, e.g. depression, eating disorders, etc.

SCWK 305  Interventions in Child Welfare (3 credits)
Prerequisite: Nine hours in behavioral studies
In this course students will learn how to protect children and support families at risk for child abuse and neglect. The course will teach students how to conduct a risk assessment and engage families and children in effective services. Practice, policies and program design of various methods of intervention including family preservation, kinship and foster care, and adoption will be covered. Attention will be given to the relationship between substance abuse and domestic violence and child abuse. Ways of promoting healthy child and family development will also be addressed. Either semester.

SCWK 320  Human Behavior and Social Environment I (3 credits)
Prerequisite: SCWK 250 and one human biology course from the following: BIOL 100, BIOL 102, BIOL 110, BIOL 111, BIOL 112, BIOL 115, BIOL 117, BIOL 121, BIOL 128. SCWK 320 must be completed before SCWK 498
This sequence examines the effects of biological, psychological and socio-cultural factors upon human behavior throughout the life span. Using an ecological perspective and social systems approach, this theoretically-oriented sequence chronologically explores human development. Human diversity, the various issues that may impel persons to maladaptive behavior, and the ways in which individuals shape and are shaped by their interactions with one another and within social institutions are all areas of focus in the sequence. Either semester.

SCWK 321  Human Behavior and Social Environment II (3 credits)
Prerequisite: SCWK 250 and SCWK 270 and SCWK 320
This course is a continuation of SCWK 320 and examines human development from adolescence through old age. Either semester.

SCWK 333  Current Issues in Aging: A Multidisciplinary Perspective (3 credits)
Prerequisite: Six credits in behavioral sciences or health
In the United States and abroad, population aging is one of the most critical challenges facing national and local governments, business, social institutions, communities and families. This course will focus on issues and concepts in the field of aging with the goal of providing an overview of key elements of gerontological competency in social work. We will cover the normal physical, psychological, social and cognitive changes in latter life and examine the services and programs available to older persons and their families.

SCWK 334  Intervention with Family Systems (3 credits)
Students will learn to conceptualize personal and interpersonal phenomena from a family systems perspective, to think in terms of circular rather than linear causality and to recognize patterns and sequences. Major theoretical family systems approaches will be presented, as well as basic intervention techniques. Offered once annually.

SCWK 338  Introduction to Social Work Practice (3 credits)
Prerequisite: Acceptance into the Social Work Program; completion of SCWK 250; and completion of SCWK 270 and SCWK 320; SCWK 320 may be taken concurrently
This course is designed to provide students with an introduction to the basic knowledge, skills and values essential to entry-level generalist social work practice. The focus will be on the application of social work knowledge and values and the development of interviewing skills as they relate to relationship building, data collection and assessment of client systems. In addition to the two-and-a-half-hour lecture weekly, the course incorporates a 90-hour field placement.

SCWK 350  Social Welfare Policy (3 credits)
Prerequisite: SCWK 250 and SCWK 270; or consent of instructor
This course follows the development of social welfare institutions and the societal response to human service needs. There is discussion of poverty and its effects on oppressed groups with special emphasis on African-Americans, Latino-speaking, women and the aged. Students are helped to analyze social policy. Either semester.

SCWK 355  Study Tour in Social Work (3 credits)
Prerequisite: Junior standing or above or consent of instructor
This course will offer students a first-hand, supervised cross cultural travel and study experience from a historical and social perspective of social problems in the country they visit. Students will participate in lecture, site visits, research and other academic experiences, including pre and post-travel activities, as appropriate. Topics focus on historical development of world cultures, practices, beliefs and response to social problems. This course is interdisciplinary in nature, drawing upon, for example, visual and performing arts, religious traditions,
political organization, economic development, social and family life. This course is repeatable for credit for different countries. (CGCL; CSOC)

SCWK 375 Data Analysis for Social Work (3 credits)
This course is designed to provide students with a foundation of descriptive and inferential statistics. It prepares students to be knowledgeable consumers of social research and to do further work in statistics and research methodology. (CQUR)

SCWK 376 Social Work with Adolescents and Young Adults (3 credits)
Prerequisite: Nine hours in behavioral sciences
This course aids students in developing a beginning framework for assessing and working with adolescents. This framework is broadly integrative, addressing biological, psychological, social and cultural variables. The course considers the complex transactions between individuals and their environments, especially the social welfare system. It also addresses the impact of trauma on adolescent development and the specific needs of emotionally traumatized adolescents. Offered once annually.

SCWK 380 Research Methods in Social Work (3 credits)
Prerequisite: SCWK 250 and SCWK 270; and SCWK 375 or PSYC 201 or SOCI 391
This course is designed to help social work students develop an understanding of social research methods and to equip them with the tools to measure the effectiveness of their practice and the quality of the services provided by human service agencies. The ethics, politics and utility of social research methods in all aspects of social work practice are explored. Particular emphasis is placed on research methods and applications unique to social work such as single-subject design studies and human services program evaluation. (Formerly SCWK 440)

SCWK 392 Treating Childhood Sexual Abuse (3 credits)
Prerequisite: Six hours/credits in psychology or sociology
This course will introduce the student to the many ways in which child sexual abuse affects a young child and family. Beginning with a brief historical overview of sexual abuse of children and our society's response to it, we will examine theoretical models for understanding abuse. The course will address the ways in which sexual abuse impacts the development of infants, toddlers and adolescents, and will include a discussion on treatment approaches for social workers and other practitioners. Offered once annually.

SCWK 399 Special Topics in Social Work (3 credits)
Prerequisite: Nine hours in behavioral sciences
Various topics in social work will be offered from time to time. Topics will be announced prior to registration. May be taken more than once. Either semester.

SCWK 415 Social Services in Alcohol and Substance Abuse (3 credits)
Prerequisite: SCWK 250 and SCWK 270
The course provides an overview of the problem of alcoholism and the various programs that deal with the problem. It has been designed primarily for students who have an interest in the area of alcoholism and substance abuse and either may be considering a career in treatment for alcoholism or may merely wish to expand their area of competence. The course focuses on the central issues of causation, resources, management, and treatment from a social work perspective. Students need to understand how the various programs and human service systems are planned, organized and evaluated. Students are introduced to theory and practice in relation to the functions that form the basis of various programs and services. Agency visits may be made. Either semester. May be taken for graduate-level credit.

SCWK 431 Social Work Practice with Individuals, Families and Groups (3 credits)
Prerequisite: SCWK 338
This course will integrate knowledge of assessment skills and intervention approaches that will enable client systems to function more effectively in view of both internal processes and sociopolitical pressures in their life situations. Strategies will be drawn from generalist practice. Either semester. May be taken for graduate-level credit.

SCWK 432 Social Work Practice with Communities and Organizations (3 credits)
Prerequisite: SCWK 338
This course deepens and expands generic social work skills and applies them to macro-level analysis and intervention in organizations and communities. Either semester. May be taken for graduate-level credit.

SCWK 435 School Social Work – History, Theory and Issues (3 credits)
Prerequisite: SCWK 250 and SCWK 330 for social work majors; SCWK 250 and instructor's consent for non-majors
This course will begin by examining the school as an ecological unit created to educate and socialize children. The evolution of school social work within this system will be traced from its inception in 1906 to the present. The three traditional models of school social work will be explored: home/school linkage, direct service provider and team member. Issues of confidentiality, team building, and assessment and referral will be discussed. The student will acquire an understanding of the application of the social work methods of casework, group work,
and community organization as practiced in the school with children in crisis and with special populations and problems. Either semester. May be taken for graduate-level credit.

SCWK 446 Social Work Practice with Groups (3 credits)
This course is designed to introduce students to the fundamentals of generalist practice social work with groups. The roles of group members, the functions and responsibilities of the leader, and the ethical principles for the conduct of group work are examined. Through the use of small group experiences, attention is given to problem solving and the development of skills in observing, developing, and evaluating the small group construct and process. Students are oriented to the development of culturally sensitive, professional skills that maximize group functioning and goals. Offered once annually.

SCWK 485 Honors Thesis (3 credits)
Prerequisite: Open to Commonwealth and Departmental Honors students
One-hour weekly meetings with the thesis director will culminate in an honors thesis. With the consent of the Department Honors Committee and the thesis director, this course may be extended into a second semester for three additional credits depending upon the scope of the project. Whether the final version of the thesis qualifies the student to graduate with honors will be determined by the department honors committee. Either semester.

SCWK 498 Field Experience in Social Work (6 credits for each semester)
Prerequisite: Admission to the social work program; SCWK 320 and SCWK 338; consent of department; formal application required
The field experience provides opportunities for students to learn how to apply knowledge and to develop skills in direct services to clients under the direction of a qualified agency field instructor. A minimum of 410 hours is spent in a wide variety of community agencies from September-May of the senior year. This experience continues to build upon the practice sequence of SCWK 330, SCWK 431, and SCWK 432. A weekly seminar throughout the year allows students to integrate social work theory and practice into a unified whole as part of their development as beginning professional practitioners. Both semesters in fall-spring sequence. (CWRM)

SCWK 499 Directed Study in Social Work (1-3 credits)
Prerequisite: Consent of the department; formal application required
Directed study is open to juniors and seniors who have demonstrated critical and analytical abilities in their studies and who wish to pursue a project independently. This course may be taken twice for a maximum of six credits. Offered either semester.

SCWK 500 Policy I: Social Welfare Policy (3 credits)
Prerequisite: Matriculation in the MSW program
The course introduces students to the American social welfare systems and the social policies that serve as its underpinnings. It provides a historical perspective, with attention to important social, economic and political contexts. Analysis of different values and ethical positions will illustrate the degree to which they promote social and economic justice and serve underrepresented populations. Students will be introduced to a framework for policy analysis for use in evaluating policy responses to key social problems including poverty, health care, substance abuse, housing, child welfare, mental health, hunger and issues facing the elderly. Special attention will be paid to social problems and policy responses in Southeastern Massachusetts. Offered once annually.

SCWK 502 Dynamics of Diversity and Oppression (3 credits)
Prerequisite: Matriculation in MSW program; may be taken concurrently with SCWK 500
This course introduces students to the concepts of diversity and oppression in our society as a foundation for the later infusion of these concepts throughout the MSW curriculum. Students will explore the dynamics of diversity, power differences and oppression as part of an examination of systems of privilege and disadvantage based on race, gender, age, sexual orientation, (dis)ability, class and economic status, religion and other forms of social differentiation and stratification. Offered once annually.

SCWK 503 Directed Study (1-3 credits)
Prerequisite: Consent of the MSW program director
Directed study is designed for the graduate student who desires to study selected topics in a specific field. For details, consult the paragraph titled "Directed or Independent Study" in the "College of Graduate Studies" section of this catalog. This course may be repeated for a maximum of six credits.

SCWK 508 Policy II: Policy Advocacy, Development and Analysis (3 credits)
Prerequisite: Matriculation in the MSW program and SCWK 500 and SCWK 502
This course offers students an opportunity to develop the knowledge, skills and attitudes necessary to become effective policy advocates. As policy advocates, social workers work to influence and change social policies in communities, agencies or legislative settings, with the goal of addressing social problems, increasing social justice and assuring access to essential social resources, especially for groups that lack relative power in our society. The course will introduce skills for analyzing, developing, implementing, and assessing policy at varying levels of sponsorship and implementation. Offered once annually.
SCWK 510 Human Behavior in the Social Environment I (3 credits)
Prerequisite: Matriculation in the MSW program; may be taken concurrently with SCWK 500 and SCWK 502
This course introduces students to the multiple contexts in which people function—communities, organizations and families—and to the theoretical base that underlies social work practice. Building on the contributions to our understanding of human functioning provided by biology, psychology, sociology, economics and political science, it explores the challenges and opportunities created by multiple systems and by diverse and sometimes conflicting theoretical explanations of human behavior. Offered once annually.

SCWK 511 Human Behavior in the Social Environment II (3 credits)
Prerequisite: Matriculation in MSW program and SCWK 500 and SCWK 502 and SCWK 510
This course will present theories related to strengths-based practice such as social constructivism, narrative theory and family systems theory which foster understanding of resiliency used throughout the lifespan to face selected developmental challenges. A lifespan approach will highlight the common development themes of each stage along with an appreciation of inherent strengths that come from an integrated biopsychosocial cultural and familial understanding. Offered once annually.

SCWK 512 Human Behavior in the Social Environment III: DSM-IV-TR (3 credits)
Prerequisite: Matriculation in MSW program and SCWK 511; or consent of program coordinator
This course will expose students to multiple perspectives in assessing and diagnosing children, adolescents and adults. Students will learn how to assess a client system within the framework of the mental health system which relies on the DSM-IV-TR. Students will use direct experience with their clients to understand the impact of mental illness on a client and on family functioning. The ethics of using these assessments will also be explained. Offered once annually.

SCWK 530 Social Work Practice I (3 credits)
Prerequisite: Matriculation in the MSW program; must be taken concurrently with SCWK 590
This course introduces social work practice skills for working with individuals, families, and small groups. Students are introduced to the problem-solving process and to the process of building a professional relationship. Policies, purposes, and functions of social service agencies are examined. Attention is given to the development of culturally congruent social work practice skills in relation to age, ethnicity, gender and other variables.

SCWK 531 Social Work Practice II: Groups and Community-Based Practice (3 credits)
Prerequisite: Matriculation in the MSW program and SCWK 530; must be taken concurrently with SCWK 591; or consent of program coordinator
This course introduces the knowledge, skills and values needed to enhance the responsiveness of communities and organizations to the needs of their constituents. The health and resilience of individuals and families depends substantially on the policies and practices of the communities and social institutions in which they dwell. The course aims to prepare social workers to work with community members to ensure the provision of needed resources to all and to enable human services agencies to deliver effective services. Techniques for analyzing communities and organizations and skills for facilitating system change such as coalition-building, lobbying, and using the media will be covered.

SCWK 540 Introductory Social Research (3 credits)
Prerequisite: Matriculation in the MSW program
This course introduces students to the role of research in social work and familiarizes students with the basic concepts and methods of social science research. It emphasizes ethical decision-making within the research process as it introduces students to research techniques including surveys, experiments, single-subject designs, qualitative methods and program evaluation. The stages of the research process including question formulation and hypothesis generation, research designs development of research instruments, and understanding findings will be addressed. Throughout, attention will be paid to the evaluation and application of existing social science research in social work practice and to the contributions made by social workers to new knowledge. Offered once annually.

SCWK 541 Research: Evaluating Practice (3 credits)
Prerequisite: Matriculation in MSW program and SCWK 540; or consent of program coordinator
The second required course in the research sequence builds on the skills introduced in SCWK 540 and introduces students to issues and procedures involved in analyzing social science research data. Students will learn what questions to ask regarding the selection of analytic strategies, how to understand the data analysis process, and how to use SPSS as an analytic tool. They will increase their skills in evaluating the data analysis decisions of other researchers, and, thus, their findings. They will also be introduced to the process of presenting analytic data through graphs and tables and through written reports. Offered once annually.

SCWK 550 Social Work Practice III: Intergenerational Strengths-Based Practice with Families (3 credits)
Prerequisite: Matriculation in the MSW program or as an Advanced Standing student; must be taken concurrently with SCWK 593
This is the first of two concentration practice courses. This course will present theoretical analysis of clinical models for working with
This advanced policy course will examine mental and physical health care policy functioning, policy analysis, program evaluation and new program development to preparing a comprehensive approach to social work intervention, students will engage in a planned change process on behalf of populations at risk. They will apply their knowledge of human

SCWK 559 Study Tour in Social Work (3 credits)
(Country to be determined) This course will offer students a first-hand, supervised cross cultural travel and study experience from a historical and social perspective of social problems in the country they visit. Students will participate in lectures, site visits, research and other academic experiences, including pre and post-travel activities, as appropriate. Topics focus on historical development of world cultures, practices, beliefs and response to social problems. This course is interdisciplinary in nature, drawing upon perspectives such as visual and performing arts, religious traditions, political organization, economic development, social and family life. This course may be repeated for different destinations.

SCWK 570 Integrative Seminar I (3 credits)
Prerequisite: Matriculation in the MSW program and SCWK 541
This capstone course provides an opportunity for students to synthesize, expand and apply the learning achieved during the MSW program. Focusing on the program's theme of intergenerational family-based practice utilizing a strengths and resiliency model of intervention, students will engage in a planned change process on behalf of populations at risk. They will apply their knowledge of human functioning, policy analysis, program evaluation and new program development to preparing a comprehensive approach to social work practice. Offered once annually.

SCWK 572 Social Policy III: Mental and Physical Health Care Policy (3 credits)
Prerequisite: Matriculation in the MSW program and SCWK 508; or consent of MSW coordinator
This advanced policy course will examine mental and physical health care policy to promote students’ in-depth knowledge regarding policy in the United States and globally. Utilizing a social justice knowledge base, students will examine mental and physical health care policy, the history, present and future as it impacts various client systems, including individuals, families, groups and communities. The focus will include the role that social policy plays in social work practice as well as the role of the social work profession in the development of health care policy. Students will consider the social construction of “health” and “illness” as it relates to policy development. Students will explore issues relating to confidentiality, ethical practice, as well as equitable access to quality care. They will conduct in-depth examinations of the role of the various levels of government in the provision of services, as well as the organizational structures of service delivery, including financing and delivery of mental and physical health care. Finally, students will become knowledgeable in mental and physical health care policy in Massachusetts.

SCWK 580 Special Topics (1.5-3 credits)
Prerequisite: Dependent on topic
Special topics of current relevance in social work will be offered each semester. Topics to be addressed will be announced prior to registration. This course may be taken six times with different topics for a maximum of nine credits.

SCWK 590 Field Practice and Seminar I (3 credits)
Prerequisite: Matriculation in the MSW program; must be taken concurrently with SCWK 530
This is the first of a two-semester practicum that provides for the integration of the student's learning into the field. Students are placed in a single social work setting for 16 hours per week, working directly under the supervision of an MSW professional. Students meet in lecture sessions once a week for two hours for the purpose of integrating field practice experiences and the application of social work theory, knowledge, skills and values. Barriers to full participation by the disadvantaged in society’s economic, political, and social processes are explored, as are the economic and ethical challenges to professional practice. Graded on a (P) Pass/(N) No Pass basis. Offered once annually.

SCWK 591 Field Practice and Seminar II (3 credits)
Prerequisite: Matriculation in the MSW program; must be taken concurrently with SCWK 531
This is the second of a two-semester practicum that provides for the integration of the student's learning into the field. Graded on a (P) Pass/(N) No Pass basis. Offered once annually.

SCWK 592 Field Practice III (4 credits)
Prerequisite: Matriculation in the MSW program; must be taken concurrently with SCWK 551
This is the second year, two-semester practicum that offers the student ongoing opportunities to integrate classroom learning in the field.
Students are placed in a single social work setting for both semesters for 24 hours per week, working directly under the supervision of an MSW professional. Students meet on a scheduled basis with their faculty adviser to assess progress and problem-solve. Graded on a (P) Pass/(N) No Pass basis. Offered once annually.

SCWK 593 Field Practice IV (4 credits)
Prerequisite: Matriculation in the MSW program; must be taken concurrently with SCWK 550
This is the second semester of the second year, two-semester practicum that offers the student ongoing opportunities to integrate classroom learning in the field. Students are placed in a single social work setting for both semesters for 24 hours per week, working directly under the supervision of an MSW professional. Students meet on a scheduled basis with their faculty adviser to assess progress and problem-solve. Graded on a (P) Pass/(N) No Pass basis. Offered once annually.

Social Work: Other Approved Courses

SCWK 398 Junior Year Fieldwork Practice
SCWK 400 Social Services in the Health Care Field

- SOCIOLOGY

SOCI 102 Introduction to Sociology (3 credits)
This course covers such areas as social structure, basic human institutions, analysis of social processes and major social forces. Either semester. (CMCL; CSOC)

SOCI 103 Social Problems (3 credits)
Contemporary social problems which are reflected in the behavior of individuals, but whose origins and causes lie outside of individuals. Topics treated will include drug abuse, crime, juvenile delinquency, divorce and other family problems, mental illness and other health problems, social class, and selected social issues. Either semester. (CMCL; CSOC)

SOCI 104 Global Social Problems (3 credits)
This course treats major world problems with particular emphasis upon those faced by non-Western peoples. The interdependence between economically developed and underdeveloped parts of the world will be explored according to such themes as collective versus individual good, short- versus long-term planning and cooperation versus competition. Either semester. (CGCL; CMCL; CSOC)

SOCI 120 Mentoring for Social Change (3 credits)
Prerequisite: Consent of instructor
Mentoring and leadership are two skills most useful to students in their college and post-college lives. This course will explore the literature on these topics and on at-risk youth. Guest speakers will discuss different approaches to leadership and mentoring. Students will be given assignments, exercises and techniques geared toward improving their mentoring capacities. Successful students will be asked to participate in an exciting mentoring collaboration for local at-risk youth.

SOCI 135 Freshman Honors Colloquium (1 credit)
Prerequisite: Open to Commonwealth Honors students and to others at the discretion of the instructor
Freshman Honors Colloquia allow honors students to explore challenging topics in discussion-based small classes. Specific topics vary by semester and instructor. Colloquia meet once per week for 50 minutes and are open to Commonwealth Honors students and others by consent of the instructor. The minimum enrollment is two and the maximum is 12. Fall semester.

SOCI 136 Freshman Honors Colloquium (1 credit)
Prerequisite: Open to Commonwealth Honors students and to others at the discretion of the instructor
Freshman Honors Colloquia allow honors students to explore challenging topics in discussion-based small classes. Specific topics vary by semester and instructor. Colloquia meet once per week for 50 minutes and are open to Commonwealth Honors students and others by consent of the instructor. The minimum enrollment is two and the maximum is 12. Spring semester.

SOCI 199 First Year Seminar (3 credits)
Prerequisite: Open to all freshmen with a writing placement score of 3 or above or a SAT score of 500 or above or who have completed ENGL 101. Students with 24 or more transfer credits will have this requirement waived.
First Year Seminars (FYS) are writing-intensive, topic courses that introduce students to academic thought, discourse and practices. FYS courses prepare and orient students toward productive and fulfilling college careers by actively engaging them in a specific academic area of interest. Students will improve their writing, reading, research and basic information and technology skills while learning to work both
These courses will fulfill the First Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one FYS course may be taken for credit. (CFYS)

**SOCI 203  The Family (3 credits)**
*Prerequisite: SOCI 102 or consent of instructor*
This course examines the family as a social institution in terms of its historical and cultural development. Students will also analyze psychological and social factors of contemporary family life. *Either semester. (Formerly SOCI 303)*

**SOCI 204  Gender, Sexuality and Society (3 credits)**
*Prerequisite: SOCI 102 or consent of instructor*
Sexuality is a central aspect of human social life. This course closely examines the theories, concepts, practices, and ramifications relating to issues of sex, gender, sexuality and identity. It will increase students' understanding of the connections between human sexual attitudes and behaviors and larger social forces, and will examine taken-for-granted societal assumptions about human sexuality. Topics include the social construction of sex, gender, and sexual orientation; the interaction of gender roles and sexual attitudes; pornography; prostitution; date rape; and sexual harassment. (CMCL; CSOC; CWRT)

**SOCI 205  Sports in Society (3 credits)**
*Prerequisite: SOCI 102 or consent of instructor*
Sport is a multi-dimensional phenomenon. It is so pervasive in the Western world that its mark has been stamped on every social institution. This course will use the conceptual frameworks, theories, and research methods of sociology to look at and better understand sport within the social context. The course will examine specific problems such as those faced by women in sport, ethnic outsiders and iconic sports figures. Topics including politics, education, deviance, the family, collective behavior, violence and stratification will be addressed. *Offered alternate years.*

**SOCI 206  Cities and People: Urban Sociology (3 credits)**
*Prerequisite: SOCI 102 or consent of instructor*
This course examines cities and urbanization in comparative perspective. It will also focus on changing urban social structures, the nature of city life, urban planning and grassroots participation in urban change. *Offered alternate years, spring semester. (Formerly SOCI 306)*

**SOCI 207  Social Inequality (3 credits)**
*Prerequisite: SOCI 102 or consent of instructor*
This course explores inequality in the U.S. within a global context. The class focuses on the major dimensions of social inequality: class, race and ethnicity, and gender. It examines the causes, processes, and consequences of inequality and stratification. Topics covered include wealth and poverty inequality, crime, and criminal justice inequality and health; education and social mobility; and policy questions related to inequality and poverty. *Every semester. (Formerly SOCI 304)*

**SOCI 208  Sociology of Religion (3 credits)**
*Prerequisite: SOCI 102 or consent of instructor*
Comparative study of religious systems and institutions; function and role of religion and the church in society; professional status, history and relations of the clergy. *Spring semester. (Formerly SOCI 108)*

**SOCI 211  Homelessness in U.S. Society (3 credits)**
*Prerequisite: SOCI 102*
This course will explore the causes of and possible solutions to homelessness as a feature of contemporary life in urban, suburban and rural settings. The course will also examine homelessness in the context of what home means for us as individuals and as a society. Although home means different things for different people, it is generally understood as a socializing force that shapes how we understand both the world and ourselves. This course examines cultural conceptions of home as an anchor for personal identity. (CSOC; CWRT)

**SOCI 213  Family Violence (3 credits)**
*Prerequisite: SOCI 102 or CRJU 201 or consent of instructor*
This course examines violence in the family from sociological and criminological perspectives. It also examines the response of the criminal justice system to family violence. The course examines the extent, types and causes of violence in families and domestic units and will also analyze the reasons why most family violence is directed against women and children. The course considers recommendations for family intervention and policies for the prevention of family violence, as well as the social and legal implications of those recommendations. *Offered alternate spring semesters. (Formerly SOCI 313)*

**SOCI 214  Middle Eastern Societies (3 credits)**
*Prerequisite: SOCI 102 or consent of instructor*
This course introduces the cultures and social structures of Middle Eastern societies, with a focus on social change in the region. Topics
covered include the role of Islam, patterns of leadership, the distribution of wealth and power, family patterns, the position of women and the nature of work. *Every semester.* (CGCL; CMCL; CSOC)

**SOCI 215 Death, Dying and Bereavement (3 credits)**
Prerequisite: SOCI 102 or consent of instructor
The study of death deals with questions at the roots of human experience. Encounters with death are individual, yet socially constructed. Human reactions to death and the rituals surrounding it are influenced by various social factors including family, peers, gender, race and ethnicity and our own identity. This course will help students appreciate the diversity of death and bereavement practices and will offer students critical-thinking skills that will be useful as they encounter death-related issues. Topics will include end-of-life care, suicide, euthanasia, funeral practices, bereavement and loss and near death experiences. *(Formerly SOCI 317)*

**SOCI 217 East Asian Societies: China and Japan (3 credits)**
Prerequisite: SOCI 102 or consent of instructor
This course examines the cultural and social structure of traditional and modern China and Japan. The course will focus on topics such as work and economy, rural-urban contrasts, family and kinship, the position of women and the relationships between state and society. The course will conclude with an assessment of the positions of these two societies in the contemporary world. (CGCL; CMCL; CSOC)

**SOCI 218 Chinese Society and Culture (3 credits)**
Prerequisite: SOCI 102 or consent of instructor
This course provides a general introduction to Chinese society and culture. It examines the structure of Chinese society and the characteristics of Chinese culture. The course pays particular attention to China's economic reform and its social and political consequences. Topics covered include Confucianism, Chinese martial arts, free market within a communist regime, China's political future, changing Sino-U.S. relations, and growing prosperity and inequality in China. (CGCL; CSOC)

**SOCI 219 Population and Society (3 credits)**
Prerequisite: SOCI 102 or consent of instructor
This course describes the mutual influence of demography and social structure. Trends in population growth and their effect on industrialization and urbanization will be covered in the context of developed and Third World nations. *Alternate years.* (CSOC; CWRT)

**SOCI 220 The Developing World (3 credits)**
Prerequisite: SOCI 102 or consent of instructor
This course introduces the sociological aspects of comparative international development and the role of the developed world in that process. The course will address issues such as industrialization, urbanization, education, globalization, population growth, environmentalism, class structures, political structures, and contrasting development models. *Fall semester.* (CGCL; CMCL; CSOC)

**SOCI 227 Deviance and Social Control (3 credits)**
Cross Listed with CRJU 227
Prerequisite: SOCI 102 or CRJU 201 or consent of instructor
This course examines deviant acts with an eye toward understanding social order and change. Topics covered include the types and causes of deviance, the social conditions and elements of deviant acts, and the effects of deviance and mechanisms for prevention, punishing and rehabilitating deviant individuals and groups. *Every semester.* *(Formerly SOCI/CRJU 327)*

**SOCI 228 Criminology (3 credits)**
Prerequisite: SOCI 102 or consent of instructor
This course will be concerned with theories of crime causation, and perspectives on administration, treatment, prevention and prediction. Consideration will be given to the influence of social class and other factors in criminal behavior. *Every semester.* *(Formerly SOCI 328)*

**SOCI 255 Juvenile Delinquency (3 credits)**
Cross Listed with CRJU 255
Prerequisite: SOCI 102 or CRJU 201 or consent of instructor
Analysis of the nature and types of juvenile behavior that violates law; the mechanisms of defining such behavior as delinquent; and the relationship between delinquency and the social situations of juvenile offenders. *Fall semester.* *(Formerly SOCI/CRJU 355)*

**SOCI 265 Sociology Study Tour (3 credits)**
Prerequisite: Consent of instructor and application through the International Programs Office
This course will offer students a first-hand, supervised, cross-cultural travel and study experience from a sociological perspective. Students will participate in lectures, site visits, research and other academic experiences. Pre-departure and while traveling, students will learn about local society and culture, both current and historical, and have the opportunity to study and experience arts, religious traditions, political organizations, economy, sustainability, folklore and family life. This course may be taken twice for credit for travel to different destinations.
SOCI 280  Genocide and Political Violence (3 credits)
Prerequisite: SOCI 102 or SOCI 104 or consent of instructor
This course explores the perplexing and disturbing reality of widespread genocide and political violence throughout the world, particularly during the course of the 20th century and into the new millennium. We will explore the causes of genocide, what constitutes genocide, how genocide is rationalized and allowed to continue and what ends genocide. Case studies covered may include the Holocaust, Armenia, Rwanda, Burma, El Salvador, Guatemala, Nicaragua, Argentina, East Timor, Chiapas, Sierra Leone, Uganda, Sudan, Bangladesh, Tibet and Congo. Spring semester.

SOCI 286  Sophomore Honors Colloquium (1 credit)
Prerequisite: Open to Commonwealth Honors students and others at the discretion of the instructor
Sophomore Honors Colloquia allow honors students to explore challenging topics in discussion-based small classes; specific topics vary by semester and instructor. Colloquia meet once per week for 50 minutes. The minimum enrollment is two and the maximum is 12. Fall semester.

SOCI 287  Sophomore Honors Colloquium (1 credit)
Prerequisite: Open to Commonwealth Honors students and others at the discretion of the instructor
Sophomore Honors Colloquia allow honors students to explore challenging topics in discussion-based small classes; specific topics vary by semester and instructor. Colloquia meet once per week for 50 minutes. The minimum enrollment is two and the maximum is 12. Spring semester.

SOCI 290  Seminar: Social Theory (3 credits)
Prerequisite: SOCI 102 or consent of instructor; for majors in sociology and behavioral sciences
This course addresses the history of social theory and selected topics in modern social theories, analysis of alternative conceptual approaches and their methodological requirements. Either semester. (Formerly SOCI 400)

SOCI 298  Second Year Seminar (Speaking Intensive) (3 credits)
Prerequisite: 199; Open to all sophomores and juniors who have completed ENGL 101, and the speaking skills requirement. Students with 54 or more transfer credits will have this requirement waived. Cannot be taken if 299 is taken for credit. Second Year Seminars (SYS) are speaking-intensive, topic courses that build on the academic skills and habits introduced in the First Year Seminar. SYS courses engage students in a specific academic area of interest and provide them with the opportunity to reinforce, share and interpret knowledge. Students will improve their speaking, reading, research and basic information and technology skills while building the connections between scholarship and action that are required for lifelong learning. These courses will fulfill the Second Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one SYS course may be taken for credit. (CSYS)

SOCI 299  Second Year Seminar (Writing Intensive) (3 credits)
Prerequisite: 199; Open to all sophomores and juniors who have completed ENGL 101 and ENGL 102. Students with 54 or more transfer credits will have this requirement waived. Cannot be taken if 298 is taken for credit. Second Year Seminars (SYS) are writing-intensive, topic courses that build on the academic skills and habits introduced in the First Year Seminar. SYS courses engage students in a specific academic area of interest and provide them with the opportunity to reinforce, share and interpret knowledge. Students will improve their writing, reading, research and basic information and technology skills while building the connections between scholarship and action that are required for lifelong learning. These courses will fulfill the Second Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one SYS course may be taken for credit. (CSYS)

SOCI 302  Cyberspace and Society: Sociological Perspectives (3 credits)
Prerequisite: SOCI 102 and SOCI 290; or consent of instructor
both positively and negatively. The course will also focus on inequality (the “digital divide”), the role of the Internet in developing community, the implications of the Internet and the Web for the control over and access to information, the social and cultural effects of technological change, and the effects of the Internet and the Web on work, economy and community. The course will also examine race, ethnicity, class and gender in relation to the digital divide.

SOCI 305  Sociology of Education (3 credits)
Prerequisite: SOCI 102 and SOCI 290; or consent of instructor
This course examines schools as social organizations, the culture of schools, the relationships between education and social stratification and the sociology of educational reform. All levels of education are considered, from kindergarten through higher education. Fall semester.

SOCI 307  Medical Sociology (3 credits)
Prerequisite: SOCI 102 and SOCI 290; or consent of instructor
Concepts of health, illness, disease, and health care analyzed from the perspectives of patient (client), practitioner and relevant third
parties. Medicine will be analyzed as a social system, with attention to factors in the physical and sociocultural environment and case materials will be drawn from non-Western as well as Western societies. Offered alternate years, fall semester.

**SOCI 310**  Women and Crime (3 credits)
Prerequisite: SOCI 102 and SOCI 290; or CRJU 201; or consent of instructor
This course examines women and crime from sociological and criminological perspectives. The course will cover a wide variety of topics related to women and crime, including crimes against women, crimes perpetrated by women, women in prison and women as criminal justice system officials. The course will closely examine violent crimes against women including rape, murder and battering. It will also focus on battered women who kill their attackers. Other important topics include feminist criticisms of mainstream criminology and the emergence of feminist theories in criminology. Fall semester.

**SOCI 312**  Discrimination and Prejudice (3 credits)
Prerequisite: SOCI 102 and SOCI 290; or consent of instructor
This course is a study of the relationship between majority and minority groups in America, with attention to the domination of categories of people on the basis of their race, sex, age, ethnicity and/or religion. Theories and data will be presented concerning the development, maintenance and operation of discrimination and prejudice and the relationship between them. Fall semester.

**SOCI 315**  Race and Ethnicity in America (3 credits)
Prerequisite: SOCI 102 and SOCI 290; or consent of instructor
This course explores debates on diversity within the U.S. by taking a sociological perspective on the experiences of various racially and ethnically defined groups and on the relations among those groups. Drawing on a sociological approach to immigration, race and ethnicity, stratification and conflict, the course focuses on the role of power, privilege and access to resources in the social construction of race and ethnicity. The course will also examine important policy debates, including those over Affirmative Action, poverty, crime and criminal justice; inequality and health education and social mobility; and policy questions related to inequality and poverty. Fall semester.

**SOCI 316**  Social Movements (3 credits)
Prerequisite: SOCI 102 and SOCI 290; or consent of instructor
Many societies have been shaped by and continue to be affected by a politically diverse array of social movements. In the United States, social movements focusing on temperance, abolition, labor, civil rights, women's rights, fundamentalism and environmental issues have played major roles. This course provides an overview of social movements and their effects on cultures, societies and individuals. Topics covered include the structures and stages of social movements, and theories of the emergence of social movements.

**SOCI 322**  Sociology of Childhood (3 credits)
Prerequisite: SOCI 102 and SOCI 290; or consent of instructor
This course recognizes and examines childhood as a social construction that differs within various historical, economic, social and cultural contexts. Topics covered will include socialization; peer culture; the institutionalization of childhood; the racial, cultural, economic and gender dimensions of childhood; and the emergence of adolescence. Alternate spring semesters.

**SOCI 323**  Sociology of Adolescence (3 credits)
Prerequisite: SOCI 102 and SOCI 290; or consent of instructor
This course provides a critical examination of adolescence in North American societies, focusing on the causes and consequences of the lengthened period in which the transition to adulthood occurs. It provides a brief history of adolescence research identifying a select set of topics, themes and research problems that guide current research on adolescence and youth. These themes include, but are not limited to, peer group relations, biological influences on adolescence, employment experiences, increased autonomy, racial and gender differences, youth culture, dating patterns, family and education. Special emphasis will be placed on the relationship of adolescents' social roles to processes of social change and stability. Offered alternate years.

**SOCI 326**  Social Gerontology – Sociology of Aging (3 credits)
Prerequisite: SOCI 102 and SOCI 290; or consent of instructor
This course will focus on aging in America as a social problem. Topics covered will include reasons for the view of aging as a problem, the impact of aging on individuals and society, sociological theories of aging and proposed ways of alleviating or eliminating aging as a problem. Spring semester.

**SOCI 329**  Public Opinion and Mass Media (3 credits)
Prerequisite: SOCI 102 and SOCI 290; or consent of instructor
Principles of mass communication and public opinion will be discussed from the point of view of the source of a message, the message itself, the audience, the channel through which the message proceeds and the effect of the message. Offered once every three years.

**SOCI 330**  Women's Roles: Sociology of Sex and Gender (3 credits)
Prerequisite: SOCI 102 and SOCI 290; or consent of instructor
An analytical study of the relation of sex to power and influence in society. Differentiation in sex roles as affected by the economy and reinforced by other institutions. New alternatives for women. **Spring semester.**

**SOCI 332 Sociology of Organizations (3 credits)**
Prerequisite: SOCI 102 and SOCI 290; or consent of instructor
Analysis of the emergence, structure, function, culture and social significance of complex organizations. Emphasis will be placed upon the results of research in hospitals, schools, prisons and military and industrial organizations. Attention will be given to informal associations and organizational change. **Spring semester.**

**SOCI 334 White Collar Crime (3 credits)**
Cross Listed with CRJU 334
Prerequisite: SOCI 102 and SOCI 290; or CRJU 201; or consent of instructor
Broadening the definition of crime, this course will study behavioral systems involved in the commission of white collar crimes in complex structures such as government bureaucracies, multi-national corporations and underground systems. The modern institutional factors – political and social – permitting or restricting the commission of such crimes will be investigated. Specifically, the performance of the criminal justice system will be examined. **Spring semester.**

**SOCI 338 Game Theory and the Law (3 credits)**
Prerequisite: SOCI 102 and SOCI 290; or consent of instructor
This course will use game theory to study how legal rules affect the way people behave. Game theory as a tool of analysis offers powerful insights into how people make decisions. This course conveys the concepts and methods of game theory through analysis of legal problems, including criminal law, torts, contact law, antitrust, bankruptcy and civil procedure, etc. The applications emphasize the ways to restructure institutions to encourage mutually advantageous outcomes. (CQUR; CSOC)

**SOCI 340 Sociology of Politics (3 credits)**
Prerequisite: SOCI 102 and SOCI 290; or consent of instructor
A study of the state, political practices, power and theories in the field. The emphasis is on the sociological conditions under which the above phenomena evolve. **Offered alternate years, spring semester.**

**SOCI 342 Comparative Sociology (3 credits)**
Prerequisite: SOCI 102 and SOCI 290; or consent of instructor
This course explores different varieties of human behavior, beliefs, values, and social structure in different societies. The diversity shows that people are shaped by the social context around them, and social rationalization is based on culture and tradition. Social institutions and policies in the United States are examined first and then compared to the experiences of selected countries in East Asia (China and Japan) and Europe (primarily Britain, Germany and Sweden). Comparison is used as the explicit means to interpret social formations. **Offered yearly.**

**SOCI 351 Sustainable Cities (3 credits)**
Prerequisite: SOCI 102 and SOCI 206 and SOCI 290; or consent of instructor
A sustainable city is one that does not pollute the environment, that promotes economic development and the fair and equitable distribution of resources for all citizens. This course offers a sociological perspective of whether it is possible to work simultaneously to achieve these goals. Traditionally associated with environmental pollution, poverty and vice, cities throughout the world are beginning to question how to improve their quality of life and make themselves more sustainable. This course will examine the historical development of cities and suburbs, and examine innovative initiatives that have been successful in reducing greenhouse gas emissions, reducing poverty and maximizing profit.

**SOCI 352 Urban Crime (3 credits)**
Prerequisite: SOCI 102 and SOCI 290; or CRJU 201; or consent of instructor
This course examines urban and neighborhood crime. In addition to surveying theories of urban crime, disorder and unrest, it examines responses to urban crime, including community policing, order maintenance policing, crime prevention through environmental design and programs to ameliorate the deeper causes of crime. The course examines the effects of inequality, racial and ethnic discrimination, substance abuse and gun violence on urban crime. Another topic covered is the drop in urban crime rates during the 1990s. **Offered alternate years.**

**SOCI 353 Cities in a Global Context (3 credits)**
Prerequisite: SOCI 102 and SOCI 206 and SOCI 290; or consent of instructor
The world is now urban. From global cities such as New York, Tokyo and London, to large but much poorer cities such as Sao Paolo, Mexico City and Cairo, over half of the world's population lives in cities. In order to understand cities in a global context, the course covers the processes of globalization especially as they have an impact on cities around the world. Topics covered include the global cities
hypothesis, the new inequalities among and within cities, case studies of cities in the new urban global economy, global urban networks and the nature of urban life in rich and poor cities. Offered every other year.

**SOCI 356 Urban Disasters, Resilient Cities (3 credits)**  
*Prerequisite: SOCI 102 and SOCI 206 and SOCI 290; or consent of instructor*  
This course focuses on urban vulnerability and resilience to disasters. We will examine why certain cities are more vulnerable than others and why disasters have more serious consequences for some groups than for others. In addition to examining the causes and consequences of urban disasters, the course will look at how cities recover from disasters and what factors help them to become "resilient cities." We will also look at social and policy aspects of natural and man-made urban disasters. Another focus of the course will be on the relationships between urban disasters and urban sustainability. The course will examine case studies of global urban disasters.

**SOCI 360 Feminist Theory in Sociology (3 credits)**  
*Prerequisite: SOCI 102 and SOCI 290; or consent of instructor*  
This course introduces students to feminist theory in sociology and social science. It also covers the history of women in social theory as well as historical and contemporary contributions by women theorists. Feminist theories of human behavior and social life will be analyzed and compared to other theories. Offered alternate years, fall semester. (CMCL; CSOC; CWRT)

**SOCI 370 Seminar: Sociological Analysis (3 credits)**  
*Prerequisite: SOCI 102 and SOCI 290; or consent of instructor*  
This course provides students with research opportunities, helps them to develop theoretical explanations and gives them practice in bringing sociological data to bear on those theoretical explanations. This course is the Writing Intensive in the major course and acts as a bridge between basic and advanced sociology courses. (CWRM)

**SOCI 380 Qualitative Methods and Urban Ethnography (3 credits)**  
*Prerequisite: SOCI 102 and SOCI 290; or consent of instructor*  
This course introduces students to qualitative research methods in social research. The course will consider the historical and theoretical background to qualitative methods, the principles of qualitative methods, as well as particular methods including participant observation, qualitative interviews, and the use of documents. Ethical issues, selection strategies and gaining access will also be addressed. Either semester.

**SOCI 390 Seminar: Research Methods in Sociology (3 credits)**  
*Prerequisite: SOCI 102 and SOCI 290 and SOCI 370; plus one other sociology course*  
This course addresses the application of scientific methods to the analysis of social phenomena, methodological orientation in sociological research procedures and the nature of sociological variables. The course is designed for majors in sociology, criminal justice or behavioral sciences. Either semester. (Formerly SOCI 402)

**SOCI 391 Seminar: Social Data Analysis (3 credits)**  
*Prerequisite: SOCI 390; or ANTH 100 and ANTH 103*  
This course introduces students to quantitative data analysis. The course focuses on the major statistical techniques used in sociology and will emphasize data analysis in the context of substantive research problems. Topics covered include data analysis packages, choosing appropriate statistics, interpreting statistical results and presenting research findings. Either semester. (Formerly SOCI 403) (CQUR; CSOC)

**SOCI 399 Special Topics in Sociology (3 credits)**  
*Prerequisite: SOCI 102 and SOCI 290; or consent of instructor*  
Various special topics of current interest in sociology will be offered from time to time. Topics will be announced prior to registration. This course may be repeated for credit for different topics.

**SOCI 410 Sociology of Urban Planning and Policy (3 credits)**  
*Prerequisite: SOCI 102 and SOCI 206 and SOCI 290; or consent of instructor*  
This course examines urban and regional planning and policy from a sociological perspective. Large-scale social forces such as uneven urban development, urban sprawl, the decentralization of metropolitan areas and deindustrialization have produced changes in various dimensions of urban life, including housing, transportation, land use, urban renewal and neighborhood life. This course examines those social forces and changes to understand the rise of urban problems and how urban and regional planning and policy can help develop more livable cities and metropolitan regions. The course introduces students to the policies, issues, processes and tools of planning within the context of the history, sociology and theory of planning and regional change. In examining the social forces and structural constraints within which planning operates, the course emphasizes the importance of inequalities of race, ethnicity, class and gender. Although the course will examine planning broadly, it will at times focus on Southeastern Massachusetts. Offered every other year.

**SOCI 426 Urban Enclaves (3 credits)**
Prerequisite: SOCI 102 and SOCI 390; or consent of instructor
This course will explore theories of ethnic persistence and change as they pertain to New England's ethnic and social communities such as Cape Verdeans, Asians, African-Americans, Italians, Jews and homosexuals. Cultural traditions, social institutions and changing beliefs of New England’s ethnic and regional communities will be examined through critical analyses of relevant cultural materials, including sociological data, folklore, oral traditions, celebrations and the media.

SOCI 485 Honors Thesis (3 credits)
Prerequisite: Admission to the Departmental Honors Program and senior status
This course is open to Commonwealth and Departmental Honors students. One-hour weekly meetings with the thesis director will culminate in an honors thesis. With the consent of the Departmental Honors Committee and the thesis director, this course may be extended into a second semester for three additional credits depending on the scope of the project. The Departmental Honors Committee will determine if the final version of the thesis qualifies the student to graduate with Honors.

SOCI 496 Senior Seminar: Critical Issues in Sociology (3 credits)
Prerequisite: SOCI 102 and SOCI 290 and SOCI 370; or consent of instructor
This course serves as a capstone course that explores critical issues in the discipline. The purpose of this course is to integrate sociological knowledge, theory and methods, and relate them to a concentrated study of a selected substantive area in sociology. Through the application of a sociological imagination, students are asked to evaluate the analyses of groups, institutions and social structures performed by members of the discipline. The final objectives are to provide students with a comprehensive understanding of the discipline and organize their knowledge in ways that are commensurate with professional standards. This course is designed for graduating seniors.

SOCI 497 Research (3 credits)
Prerequisite: SOCI 390 and consent of instructor
Under the direction of the instructor, students will conduct social research. The topic will be announced before registration. Students will write reports of findings as for publication and/or conference presentation.

SOCI 498 Internship in Sociology (3-15 credits)
Prerequisite: A cumulative GPA of 2.5; consent of the department; formal application required
The internship provides an opportunity for senior sociology majors to gain practical expertise in the field by participating in an off-campus work study experience that complements their academic preparation. In addition to working in their internship setting, students will meet regularly with a faculty supervisor. Students may work in an appropriate local, state or federal agency or private organization. Only three credits of internship may count toward the major in sociology. No more than six hours of any combination of SOCI 498 and SOCI 499 may be counted toward the first 30 hours of the sociology requirements for a major. This course may be repeated for a maximum of 15 credits. Either semester.

SOCI 499 Directed Study in Sociology (1-3 credits)
Prerequisite: Consent of the department; formal application required
Directed study is open to juniors and seniors who have demonstrated critical and analytical abilities in their studies and who wish to pursue a project independently. No more than six hours of any combination of SOCI 498 and SOCI 499 may be counted toward the first 30 hours of the sociology requirements for a major. This course may be taken twice for a maximum of six credits. Offered either semester.

SOCI 565 Sociology Study Tour (3 credits)
Prerequisite: Consent of instructor and application through the International Programs Office
This course will offer students a first-hand, supervised, cross-cultural travel and study experience from a sociological perspective. Students will participate in lectures, site visits, research and other academic experiences. Pre-departure and while traveling, students will learn about local society and culture, both current and historical, and have the opportunity to study and experience arts, religious traditions, political organizations, economy, sustainability, folklore and family life. This course may be taken twice for credit for travel to different study tour sites.

Sociology: Other Approved Courses

SOCI 339 Violence, Guns and Society (3 credits)
Cross Listed with CRJU 339
Prerequisite: SOCI 102 and SOCI 290; or CRJU 201; or consent of instructor
This course focuses on guns and lethal violence in society. Drawing on both criminal justice and sociological theory and research it examines the causes and consequences of lethal violence with special attention to the role of firearms. Topics covered include the definitions and causes of violence, the extent to which guns intensify violence, guns and lethal violence, in comparative perspective, the American gun culture, the Second Amendment, the politics of gun control, the legal regulation of guns, the relationships between gun prevalence and gun violence, and the costs of gun violence. Fall semester.
SOCI 350 Sociology of Work
SOCI 501 Graduate Seminar in Sociological Theory
SOCI 502 Research
SOCI 503 Directed Study
SOCI 504 Graduate Seminar in Sociological Research Methodology
SOCI 506 Theories of Race and Ethnic Relations
SOCI 508 Social Stratification in Comparative Perspectives
SOCI 510 Urban Community Analysis
SOCI 514 Theories of Social Deviance
SOCI 516 Sociology of Sex and Gender
SOCI 518 Sociology of Aging
SOCI 528 Seminar: Sociology of Education
SOCI 580 Special Topics in Social Research Techniques

**SPANISH**

**LASP 101 Elementary Spanish I (3 credits)**
An introduction to elementary syntactic, semantic, phonetic and paralinguistic structures is offered. Pertinent everyday cultural concepts are discussed. Relevant comparison and contrast with the native language is treated. Functional communication in the second language in a controlled environment is the principal objective of the course. *Note: See the “Departmental Foreign Language Policy” in the “Foreign Languages” section of this catalog. (CGCL; CHUM)*

**LASP 102 Elementary Spanish II (3 credits)**
*Prerequisite: LASP 101; or see the “Departmental Foreign Language Policy” in the “Foreign Languages” section of this catalog*
The further study of elementary syntactic, semantic, phonetic and paralinguistic structures is offered. Pertinent everyday cultural concepts are discussed. Relevant comparison and contrast with the native language is treated. Functional communication in the second language in a controlled environment is the principal objective of the course. (CGCL; CHUM)

**LASP 151 Intermediate Spanish I (3 credits)**
*Prerequisite: LASP 102*
A review of Spanish grammar with emphasis given to reading, writing, listening and speaking; systematic laboratory practice; an introduction to aspects of Hispanic culture. Conducted in Spanish. (CGCL; CHUM)

**LASP 199 First Year Seminar (3 credits)**
*Prerequisite: Open to all freshmen with a writing placement score of 3 or above or a SAT score of 500 or above or who have completed ENGL 101. Students with 24 or more transfer credits will have this requirement waived.*
First Year Seminars (FYS) are writing-intensive, topic courses that introduce students to academic thought, discourse and practices. FYS courses prepare and orient students toward productive and fulfilling college careers by actively engaging them in a specific academic area of interest. Students will improve their writing, reading, research and basic information and technology skills while learning to work both collaboratively and independently. These courses will fulfill the First Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one FYS course may be taken for credit. (CFYS)

**LASP 200 Intermediate Spanish II (3 credits)**
*Prerequisite: LASP 151*
This is a second semester intermediate Spanish course that continues to acquaint students with the complexities of the Spanish language and culture. Communication in the classroom is purposeful and goes beyond just “practicing” the language. The course is designed to improve both oral and written expression in Spanish. This course is conducted in Spanish. (CGCL; CHUM)

**LASP 230 Contemporary Latin American Short Story in Translation (3 credits)**
The course offers readings and discussion of the 20th-century short stories with primary focus on major literary trends and representative male/female authors. The course considers the thematic issues and narrative features that characterize works belonging to Fantastic Literature, Magical Realism, the Boom and Post-Boom and places them within an historical/cultural context. The study includes such authors as Jorge Luis Borges, Juan Rulfo, García Márquez, Rosario Ferré and Isabel Allende. Not applicable toward the Spanish major or minor. (CGCL; CHUM; CMCL)
LASP 252  Introduction to Hispanic Literature (3 credits)
Prerequisite: LASP 151 or consent of instructor
The student is introduced to the reading, analysis, and discussion of semi-edited modern literary and cultural texts from Spain, Latin America and the Caribbean. The emphasis is on the development of reading comprehension skills and vocabulary. Conducted in Spanish.

LASP 253  Introduction to Hispanic Linguistics (3 credits)
Prerequisite: LASP 200 or consent of instructor
This course serves as an introduction to Hispanic linguistics. Various topics, covering both the fundamental areas of linguistics, as well as more specialized ones, will be covered. These entail syntax (the study of the structure of sentences), morphology (the study of the formation of words), phonetics (the study of the making of sounds from a physiological perspective), phonology (the study of the relationship between sounds in a language), historical linguistics (the study of the evolution of the language through time), language acquisition (the study of the processes through which languages are acquired), sociolinguistics (the study of the use of language within a social context) and dialectology (the study of linguistic variation). No previous knowledge of linguistics is assumed. This course is conducted entirely in Spanish.

LASP 281  Spanish Conversation (3 credits)
Prerequisite: LASP 370 or consent of instructor
Fluent expression in formal and informal speech is stressed in this course. Oral proficiency is improved by the systematic study of the lexicon and speaking styles. Students must complete work in analyzing various media in Spanish. This course is conducted in Spanish.

LASP 298  Second Year Seminar (Speaking Intensive) (3 credits)
Prerequisite:_ _ _ _199; Open to all sophomores and juniors who have completed ENGL 101, and the speaking skills requirement. Students with 54 or more transfer credits will have this requirement waived. Cannot be taken if _ _ _ _299 is taken for credit. Second Year Seminars (SYS) are speaking-intensive, topic courses that build on the academic skills and habits introduced in the First Year Seminar. SYS courses engage students in a specific academic area of interest and provide them with the opportunity to reinforce, share and interpret knowledge. Students will improve their speaking, reading, research and basic information and technology skills while building the connections between scholarship and action that are required for lifelong learning. These courses will fulfill the Second Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one SYS course may be taken for credit. (CSYS)

LASP 299  Second Year Seminar (Writing Intensive) (3 credits)
Prerequisite:_ _ _ _199; Open to all sophomores and juniors who have completed ENGL 101 and ENGL 102. Students with 54 or more transfer credits will have this requirement waived. Cannot be taken if _ _ _ _298 is taken for credit. Second Year Seminars (SYS) are writing-intensive, topic courses that build on the academic skills and habits introduced in the First Year Seminar. SYS courses engage students in a specific academic area of interest and provide them with the opportunity to reinforce, share and interpret knowledge. Students will improve their writing, reading, research and basic information and technology skills while building the connections between scholarship and action that are required for lifelong learning. These courses will fulfill the Second Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one SYS course may be taken for credit. (CSYS)

LASP 300  Spanish Composition (3 credits)
Prerequisite: LASP 370 or consent of instructor
This course is designed to acquaint students with methodology/techniques and strategies of good writing practices. Students develop writing skills utilizing sources from the Spanish-speaking world. Different writing skills and styles are introduced and practiced. Use of a bilingual dictionary is practiced. This course is conducted in Spanish. (Formerly LASP 272) (CWRM)

LASP 301  The Golden Age of Spanish Literature (3 credits)
Prerequisite: LASP 252
A study of the poetry, prose and theatre from the second half of the 16th century to the Baroque period. Conducted in Spanish.

LASP 310  Contemporary Latin American Short Story (3 credits)
This course focuses primarily on stories written during the 20th century. The class will study representative texts and analyze their ideological concerns and innovative literary strategies. The class is conducted in Spanish and combines the use of lecture and discussion groups.

LASP 350  Gender, Sexuality and Politics in Hispanic Cinema (3 credits)
Prerequisite: LASP 300 and LASP 370; or consent of instructor
This course will explore Hispanic cinema from such directors as the surrealists Luis Buñuel and Salvador Dali to the contemporary work of Pedro Almodóvar, Fina Torres and Tomás Gutiérrez Alea. The study of cinematic techniques will be contextualized with reference to Hollywood, independent and European cinema. Close analysis will shed light on such issues as 1) links between the sexual body and the
body politic; 2) constructions of “woman” as monster; 3) post-Francoist countercultural critiques of family and society; 4) cinematic violence as riposte to fascist ideologies; 5) cultural spectacles such as the bullfight, religious procession, and saintly relic; 6) surrealism, magical realism, and gender. Spanish majors and minors will read supplementary material in Spanish; final essays may be written in either language. This course fulfills credit toward the Spanish major and minor and the Women's and Gender Studies minor. Offered every other year.

LASP 351  Cervantes (3 credits)
Prerequisite: LASP 401
A study of the man and his works, with special emphasis on Don Quixote. Conducted in Spanish.

LASP 370  Patterns of the Spanish Language (3 credits)
Prerequisite: LASP 252 or consent of instructor
Consideration given to writing patterns and to oral patterns with emphasis on lexicon. This course is conducted in Spanish. (Formerly LASP 271)

LASP 371  Advanced Spanish Conversation (3 credits)
Prerequisite: LASP 281
Emphasis is placed in the development of advanced oral discourse skills. Fluency in Spanish is enhanced through interactive role-plays and improvised situations using contemporary idioms. Regional and dialectical speech patterns are introduced. Systematic audio and video tape practice. Conducted in Spanish.

LASP 390  Spanish Phonetics and Phonology (3 credits)
Prerequisite: LASP 370
This course provides a comprehensive description of the sound system of Spanish. Special attention is given to the identification of pronunciation problems of non-native speakers, with an emphasis on English pronunciation patterns. Students will be required to study the phonetics terminology and to relate the readings to sample recordings of native speakers. This course is conducted in Spanish. (Formerly LASP 290)

LASP 391  Spanish Civilization (3 credits)
Prerequisite: LASP 281 or consent of instructor
Readings and discussion of topics related to Spanish civilization through the centuries are treated. Conducted in Spanish.

LASP 392  Spanish-American Civilization (3 credits)
Prerequisite: LASP 281 or consent of instructor
Readings and discussions of topics related to South American and Caribbean civilizations from pre-Columbian to modern times are treated. Conducted in Spanish.

LASP 400  Survey of Spanish Literature (3 credits)
Prerequisite: LASP 391 or consent of instructor
The course introduces the student to the principal literary movements from the Middle Ages to the present. Representative authors such as Ruiz, Cervantes, Lope de Vega, Moratin, Espronceda, Perez Galdos, Unamuno, Baroja, Garcia Lorca and Cela are treated. Conducted in Spanish.

LASP 401  Topics in Spanish Literature (3 credits)
Prerequisite: LASP 400 or LASP 402 or consent of instructor
Topics will focus on a particular genre, such as the short story or the theater, with intensive study of selected works from modern writers. Conducted in Spanish. This course may be repeated for different topics.

LASP 402  Survey of Spanish-American Literature (3 credits)
Prerequisite: LASP 392 or consent of instructor
Principal literary movements from the colonial times to the present will be introduced. Discussion will include representative works of El Inca Garcilaso de la Vega, Sor Juana Ines de la Cruz, Darío, Rulfo, Garcia Márquez and Fuentes. Conducted in Spanish.

LASP 403  Topics in Spanish-American Literature (3 credits)
Prerequisite: LASP 400 or LASP 402 or consent of instructor
Topics will focus on a particular author, theme or genre, such as the short story or the theater, with intensive study of selected works from modern writers. Conducted in Spanish. This course may be repeated for different topics.
LASP 490  Seminar in Hispanic Literature (3 credits)
Prerequisite: LASP 400 or LASP 402 or consent of instructor
Topics will be drawn from theme, genre, author and period. Conducted in Spanish. This course may be repeated for credit for different topics. May be taken for graduate-level credit.

LASP 495  Seminar in Spanish-American Literature (3 credits)
Prerequisite: Honors senior status and consent of the department
This seminar will pursue, in depth, selected topics and authors of the specific literature. To be offered as required to qualified students. May be taken for graduate-level credit.

Spanish: Other Approved Courses

LASP 110  Conversational Spanish for Medical Personnel
LASP 210  Latin American Poetry in Translation
LASP 220  Contemporary Latin American Novel in Translation
LASP 320  Latin American Poetry
LASP 381  The Middle Ages
LASP 404  19th-Century Spanish Literature
LASP 410  Latin American Novel: Early Twentieth Century
LASP 420  The Contemporary Latin American Novel
LASP 451  20th-Century Spanish Literature

SPECIAL EDUCATION

SPED 135  Freshman Honors Colloquium (1 credit)
Prerequisite: Open to Commonwealth Honors students and to others by consent of the instructor
Freshman Honors Colloquia allow honors students to explore challenging topics in discussion-based small classes. Specific topics vary by semester and instructor. This course may be repeated for a maximum of two credits. Offered fall semester.

SPED 136  Freshman Honors Colloquium (1 credit)
Prerequisite: Open to Commonwealth Honors students and to others by consent of the instructor
Freshman Honors Colloquia allow honors students to explore challenging topics in discussion-based small classes. Specific topics vary by semester and instructor. This course may be repeated for a maximum of two credits. Offered spring semester.

SPED 199  First Year Seminar (3 credits)
Prerequisite: Open to all freshmen with a writing placement score of 3 or above or a SAT score of 500 or above or who have completed ENGL 101. Students with 24 or more transfer credits will have this requirement waived.
First Year Seminars (FYS) are writing-intensive, topic courses that introduce students to academic thought, discourse and practices. FYS courses prepare and orient students toward productive and fulfilling college careers by actively engaging them in a specific academic area of interest. Students will improve their writing, reading, research and basic information and technology skills while learning to work both collaboratively and independently. These courses will fulfill the First Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one FYS course may be taken for credit. (CFYS)

SPED 202  Introduction to Special Education (3 credits)
This introductory course focuses on various aspects of education involving all learners, including educational philosophy, foundations, effective teaching practices and instructional models and professional teaching standards. Special education terminology used in describing and relating to learners with exceptional learning needs, identification of the components of special education law, and the analysis of the characteristics of students with exceptionalities, e.g., educational, psychological, medical and social, for the major disability categories, along the continuum of adaptations and accommodations will be emphasized. A 40-hour field experience is required.

SPED 203  Cultural Diversity Issues in School and Society (3 credits)
This course will introduce the major goals, principles, and concepts of multicultural education with an emphasis on the impact on school and society. It will explore the cultural, linguistic and socioeconomic factors influencing our schools. It will offer concepts to assist participants to improve the learning environment and interaction among school, parents and community. Offered either semester. (CMCL)
SPED 207  Technology in Special Education (1 credit)
This course will provide students information enabling them to identify ways in which technology can assist with managing the learning environments for students with special needs. In addition they will become familiar with sources of specialized materials, equipment and assistive technology. Students will develop skills in the use of technology, including word processing, test scoring and CAI.

SPED 211  The Early Childhood Learner with Special Needs (3 credits)
This course will enable the student to develop the instructional and behavioral competencies to foster the inclusion of young children with special needs into early childhood educational settings. This course will examine the curricular adaptations and modifications as well as the preparation, implementation and evaluation of Individualized Family Service Plans and Individualized Educational Plans. A 40-hour field experience is required.

SPED 217  Meeting the Needs of All Learners (3 credits)
This course will enable the student to identify appropriate strategies to effectively educate all learners, including students with special needs in general education settings. It will highlight instructional activities, curriculum modifications, assessment strategies and other adaptations that are usable in standards-based classroom. A 40-hour field experience is required.

SPED 229  Field Work in Special Education (3 credits)
Prerequisite: SPED 202 or SPED 203
The practical aspects of special education will be brought into focus through the use of appropriate facilities. In cooperation with area programs, specific teaching and related activities will be undertaken for use in both special needs and mainstream programs.

SPED 286  Sophomore Honors Colloquium (1 credit)
Prerequisite: Open to Commonwealth Honors students and to others by consent of the instructor
Sophomore Honors Colloquia allow honors students to explore challenging topics in discussion-based small classes. Specific topics vary by semester and instructor. This course may be repeated for a maximum of two credits. Offered fall semester.

SPED 287  Sophomore Honors Colloquium (1 credit)
Prerequisite: Open to Commonwealth Honors students and to others by consent of the instructor
Sophomore Honors Colloquia allow honors students to explore challenging topics in discussion-based small classes. Specific topics vary by semester and instructor. This course may be repeated for a maximum of two credits. Offered spring semester.

SPED 298  Second Year Seminar (Speaking Intensive) (3 credits)
Prerequisite: _ _ _ _ 199; Open to all sophomores and juniors who have completed ENGL 101, and the speaking skills requirement. Students with 54 or more transfer credits will have this requirement waived.Cannot be taken if _ _ _ _ 298 is taken for credit.
Second Year Seminars (SYS) are speaking-intensive, topic courses that build on the academic skills and habits introduced in the First Year Seminar. SYS courses engage students in a specific academic area of interest and provide them with the opportunity to reinforce, share and interpret knowledge. Students will improve their speaking, reading, research and basic information and technology skills while building the connections between scholarship and action that are required for lifelong learning. These courses will fulfill the Second Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one SYS course may be taken for credit. (CSYS)

SPED 299  Second Year Seminar (Writing Intensive) (3 credits)
Prerequisite: _ _ _ _ 199; Open to all sophomores and juniors who have completed ENGL 101 and ENGL 102. Students with 54 or more transfer credits will have this requirement waived. Cannot be taken if _ _ _ _ 298 is taken for credit.
Second Year Seminars (SYS) are writing-intensive, topic courses that build on the academic skills and habits introduced in the First Year Seminar. SYS courses engage students in a specific academic area of interest and provide them with the opportunity to reinforce, share and interpret knowledge. Students will improve their writing, reading, research and basic information and technology skills while building the connections between scholarship and action that are required for lifelong learning. These courses will fulfill the Second Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one SYS course may be taken for credit. (CSYS)

SPED 302  Principles and Application of Behavioral Management for the Special Needs Learner (3 credits)
Prerequisite: Admission to the Professional Education Program
This course will focus on basic principles, models and techniques for effective individual and classroom management in various educational environments. A field-based prepracticum experience is required at the level of license sought: PreK-8, 5-12.

SPED 303  Principles and Procedures of Assessment of Special Needs Learners (3 credits)
Prerequisite: Admission to the Professional Education Program
This course will provide students with the ability to assess educational needs of special learners. Emphasis on consideration of non-

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discriminatory procedures appropriate to social, racial and linguistic differences. Strategies for modifying teaching based on evaluation results. A field-based, prepracticum experience is required at the level of license sought: PreK-8, 5-12.

SPED 401 Professional Practices for Beginning Special Educators (3 credits)
Prerequisite: SPED 202 and admission to the Professional Education Program
This course will develop the professional skills of beginning educators. It will address the areas of Individualized Education Program (IEP) development, writing 504 plans, progress monitoring, existing state and federal laws, working in inclusion settings with general educators, supervising paraprofessionals and working with parents and community agencies. This course will examine validated professional practices in special education. (CWRM)

SPED 402 Children with Reading Disability: Diagnosis and Teaching Strategies (3 credits)
Prerequisite: Admission to the Professional Education Program
This course examines reading disability in the context of typical reading development and reviews appropriate classroom interventions. Specifically, this course addresses the acquisition and development of literacy; cognitive, physical, cultural and environmental contributions to reading disability; various models for intervention and specific instructional strategies for building skill and fluency in reading across grades and disciplines. A field-based prepracticum experience is required.

SPED 403 Curriculum Development and Implementation for Special Needs Learners (3 credits)
Prerequisite: Admission to the Professional Education Program
This course enables the student to design and implement appropriate Individual Educational Plans (IEP) under existing federal and state laws. Emphasis is placed on strategies and techniques which promote the academic, social, emotional, vocational and cultural needs of the special needs learner within a variety of instructional environments. A field-based pre-practicum experience is required at the level of license sought: PreK-8, 5-12.

SPED 404 Student Teaching Practicum: Inclusion Program (PreK-8) (6 credits)
Prerequisite: Admission to the Professional Education Program and student teaching experience
This practicum involves responsibility as a teacher in a general education classroom which includes specific services being provided for learners with special needs. This practicum is done at the PreK-8 level under a qualified cooperating teacher and a college supervisor.

SPED 405 Student Teaching Practicum: Special Education Program (PreK-8) (6 credits)
Prerequisite: Acceptance into student teaching
Program involves a minimum of 150 hours of observation, assisting and full time teaching, with a minimum of 135 hours in direct instructional responsibilities in programs for moderate special needs students. This practicum is done at the PreK-8 level under a qualified cooperating teacher and college supervisor.

SPED 406 Student Teaching Practicum: Mainstreamed Program (5-12) (6 credits)
Prerequisite: Acceptance into student teaching
Practicum involves a minimum of 150 hours of observation, assisting and full time teaching, with a minimum of 135 hours in direct instructional responsibilities in a regular classroom in which special needs students are integrated. This practicum is done at the 5-12 level, under a qualified cooperating teacher and college supervisor.

SPED 407 Student Teaching Practicum: Special Education Program (5-12) (6 credits)
Prerequisite: Acceptance into student teaching
Practicum involves a minimum of 150 hours of observation, assisting, and full time teaching, with a minimum of 135 hours in direct instructional responsibilities in a program for moderate special needs students. This practicum is done at the 5-12 level, under a qualified cooperating teacher and college supervisor.

SPED 410 Instructional and Curricular Strategies for Learners with Intensive Special Needs I (3 credits)
Prerequisite: SPED 202 and SPED 203; and admission to the Professional Education Program
This course is designed to provide knowledge relating to the curricula and instructional needs of learners with intensive special needs. Fundamental concepts of the IEP process, applicable technologies that facilitate communication, mobility, parental support, support systems and collaborative aspects will be addressed. Pre-practicum monitored, field-based experiences required.

SPED 411 Instructional and Curricular Strategies for Learners with Intensive Special Needs II (3 credits)
Prerequisite: SPED 410 and admission to the Professional Education Program
This course provides further development of issues addressed in SPED 410. Additionally, the course provides knowledge concerning advanced instructional and management strategies that can enhance the quality of life of individuals with intensive special needs. Fundamental concepts/strategies relating to social interactions, employability, constructive use of leisure time, managing behavior, communication interventions and medication management are addressed. Pre-practicum monitored, field-based experiences are required. (CWRM – special education, severe disabilities (all levels) concentration only)
SPED 412  Student Teaching Practicum: School Setting, ISN (6 credits)
Prerequisite: Acceptance into student teaching
Practicum involves a minimum of 150 hours of observation, assisting, and full-time teaching in an educational program for individuals with intensive special needs. The practicum is done at the 3-21 level, under the supervision of a cooperating practitioner and college supervisor.

SPED 413  Student Teaching Practicum: Alternative Setting, ISN (6 credits)
Prerequisite: Acceptance into student teaching
Practicum involves a minimum of 150 hours of observation, assisting, and full-time responsibilities in an alternative program for individuals with intensive special needs. This practicum is done at the 3-21 level, under the supervision of a cooperating practitioner.

SPED 415  Methods and Materials for the Academically Talented (3 credits)
Prerequisite: PSYC 100
Emphasis is placed on the identification and placement of gifted pupils in our schools and the related program, enrichment activities, creative development, method and materials, modified curriculum, administration, motivation and treatment of underachievement. May be taken for graduate-level credit.

SPED 431  Student Teaching Practicum -- Moderate Disabilities (PreK-8) (6 or 12 credits)
Prerequisite: Acceptance into student teaching
This practicum involves a minimum of 300 hours of teaching in a minimum of two distinct educational settings where students with moderate disabilities (PreK-8) are educated. This experience is supervised by a qualified cooperating practitioner and college supervisor.

SPED 432  Student Teaching -- Moderate Disabilities (5-12) (6 or 12 credits)
Prerequisite: Acceptance into student teaching
This practicum involves a minimum of 300 hours of teaching in a minimum of two distinct educational settings where students with moderate disabilities (5-12) are educated. This experience is supervised by a qualified cooperating practitioner and college supervisor.

SPED 433  Student Teaching -- Severe Disabilities (6 or 12 credits)
Prerequisite: Acceptance into student teaching
This practicum involves a minimum of 300 hours of teaching in a minimum of two distinct educational settings where students with severe disabilities are educated. This experience is supervised by a qualified cooperating practitioner and college supervisor.

SPED 436  Consulting Skills for Special Educators (3 credits)
Prerequisite: PSYC 100; and SPED 202 or SPED 510; or consent of instructor
This course emphasizes the development of consulting and training skills of the special educator. This will include a survey of the origins and dynamics of consulting techniques which will result in the student being able to work in a variety of settings. May be taken for graduate level credit.

SPED 438  Career Education for Special Needs Learners (3 credits)
Prerequisite: PSYC 100; and SPED 202 or SPED 510; or consent of instructor
This course will assist in preparing special educators to understand career educational needs of special needs learners. Students will develop skills in appropriate objective writing and curriculum design in the area of career education for special needs learners. May be taken for graduate level credit.

SPED 460  Topics in Special Education (3 credits)
Prerequisite: SPED 202 or SPED 510 or consent of instructor
This course is designed for students who desire to study selected topics in this field; it will allow for timely and relevant information to be explored. Topics change each semester. This course may be repeated for different topics.

SPED 485  Honors Thesis (3 credits)
Prerequisite: Open to Commonwealth Honors and Departmental Honors students and to others by consent of the instructor
The Honors Thesis is the culmination of a student’s work in the Honor’s Program, and may consist of either one or two semester’s pursuit of an advanced student-generated project. Students meet regularly with their thesis adviser. The thesis is read for approval by the department honors committee or its designees. This course may be repeated for a maximum of six credits.

SPED 498  Internship in Special Education (3-15 credits)
Prerequisite: Consent of the department; formal application required and admission to the Professional Education Program
Off-campus experiences in areas related to expanding the student's background in special education. In-depth exposure to such areas as rehabilitation programs, sheltered workshops, day care centers, hospital and institutional programs. This course may be repeated for a maximum of 15 credits.
SPED 499 Directed Study in Special Education (1-3 credits)
Prerequisite: Consent of the department; formal application required
Directed study is open to juniors and seniors who have demonstrated critical and analytical abilities in their studies and who wish to pursue a project independently. This course may be taken twice for a maximum of six credits.

SPED 501 Professional Practices in Special Education (3 credits)
Prerequisite: SPED 510 with a minimum grade of B; or SPED 202 with a minimum grade of B; or SPED 211 with a minimum grade of B or consent of the graduate program coordinator
This course will develop the professional skills of teachers of students with moderate special education needs in the areas of Individualized Education Plan (IEP) development, Massachusetts curriculum frameworks, existing state and federal laws, working in inclusion settings, collaborating with general educators, supervising paraprofessionals and working with parents and community agencies. Field experiences will be included.

SPED 502 Research (3 or 6 credits)
Original research undertaken by the graduate students in their field. For details, consult the paragraph titled “Directed or Independent Study” in the “College of Graduate Studies” section of this catalog. This course may be repeated for a maximum of six credits.

SPED 503 Directed Study (1-3 credits)
Directed study is designed for the graduate student who desires to study selected topics in a specific field. For details, consult the paragraph titled “Directed or Independent Study” in the "College of Graduate Studies" section of this catalog. This course may be repeated for a maximum of six credits.

SPED 504 Applied Curriculum Development for Learners with Special Needs: PreK-8 (3 credits)
Prerequisite: SPED 510 with a minimum grade of “B” or SPED 202 with a minimum grade of “B” or SPED 211 with a minimum grade of “B” or consent of program coordinator
This course will cover alternative strategies, techniques and materials to promote successful learning of the learner with special needs at the PreK-8 level. Emphasis will be on the creation of curriculum using evidenced-based practice. The focus of curriculum and instruction will be in math, language arts and content area subjects stressing Progress Monitoring using Curriculum-Based Assessment. Alternative Assessment will also be examined. Field experiences will be included.

SPED 505 Applied Curriculum Development for Learners with Special Needs: 5-12 (3 credits)
Prerequisite: SPED 510 with a minimum grade of “B” or SPED 202 with a minimum grade of “B” or SPED 211 with a minimum grade of “B” or consent of program coordinator
This course will cover alternative strategies, techniques and materials to promote successful learning of the learner with special needs at the 5-12 level. Emphasis will be on the creation of curriculum using evidenced-based practices in math, language arts and content area subjects for middle school and secondary learners, using progress monitoring in conjunction with Curriculum-Based Assessment. Transition planning and Alternative Assessment will also be examined. Field experiences will be included.

SPED 508 Strategies for Diversity (3 credits)
This course will provide students with a forum for the study, discussion, and practical inclusion of multicultural principles and strategies into the curriculum. It will investigate the many levels of culture defined within the macroculture of U.S. society. Students will gain knowledge and information of effective methods, resources and materials in order to develop and adapt techniques and strategies to implement in the contemporary multicultural classroom.

SPED 509 Teaching Reading to Learners with Disabilities (3 credits)
Prerequisite: SPED 202 with a minimum grade of B; or SPED 510 with a minimum grade of B
This course will investigate the etiology of reading disabilities: physical, cultural and environmental. The Literacy Continuum and specific language programs will be analyzed. Effective commercially available reading programs and research-based instructional strategies that are useful for teaching students with reading disabilities will be emphasized. Field-based experience may be required.

SPED 510 Exceptional Children in the Schools (3 credits)
This course will provide an orientation to the characteristics, levels of severity, definitions, and classroom accommodations and modifications for individuals with exceptional learning needs. Included is an exploration of the roles of professional organizations and service providers, and the different professionals within the school system as related to special education. Emphasis will be on legal requirements and assessment procedures underlying individualized education programs, and an understanding of instructional strategies, remedial methods and curriculum materials utilized for individuals with exceptional learning needs in both inclusive and segregated settings. Field-based experience is required.
SPED 512  Organization and Administration of Special Education (3 credits)
A comprehensive study of the psychological diagnosis, the personnel, the curriculum, the facilities, and the pupil services in an effective special education program. Introductory background information in special education is beneficial to succeed in this course.

SPED 516  Applied Collaborative Strategies (3 credits)
Prerequisite: SPED 202 or SPED 510 or matriculation in the Master's Degree Program in Special Education
This course will build on the knowledge of individual and different learning styles and thinking skills. Curriculum planning and instructional techniques will be discussed and developed. Strategies for maximizing consulting and collaborative team efforts will be covered through discussion, research role-playing and interviews. Field experience will be included.

SPED 517  Language Skills for Special Needs Learners (3 credits)
Prerequisite: Matriculation in the Master's Degree Program in Special Education
This course will cover classroom approaches and strategies for the diagnosis and analysis of language and related learning dysfunctions. Emphasis will be on the development of a total language curriculum appropriate for utilization within special education and mainstream programs.

SPED 518  Reading Strategies in Special Education (3 credits)
Prerequisite: SPED 509 with a minimum grade of B
This course will cover the areas of research diagnosis and instructional alternatives for students who need special education reading instruction. Participants will explore a variety of diagnostic tools as well as specific direct instruction models/programs utilized in special education. Skills in the area of explicit teaching approaches will be analyzed as they apply to the reading in the literacy/language arts class as well as to reading in content areas. A field-based experience allows students to incorporate new information into practical application.

SPED 520  Special Topics in Special Education (1-3 credits)
Prerequisite: Course prerequisites may be specified depending upon the nature of the topic
Special topics of current relevance in special education will be offered from time to time. The topic to be addressed will be announced prior to registration. May be taken more than once with the consent of the adviser.

SPED 522  The Inclusion Classroom: Philosophy and Implementation (3 credits)
This course will enable the participants to identify and apply appropriate strategies, techniques and curriculum adaptations to promote success for students with exceptional learning needs in the general education classroom. Consideration will be given to the philosophical and legal considerations for inclusion/main-streaming. Field experiences will be required.

SPED 524  Curriculum Development for Learners with Severe Disabilities I (3 credits)
Prerequisite: SPED 510 with a minimum grade of B; or consent of the graduate program coordinator
This course will focus on current best practices in curriculum and methods for students with severe disabilities. It will focus on curriculum-based assessment, IEP development, systematic instruction in substantially separate and inclusive classrooms and community settings by emphasizing evidenced-based instructional strategies to prepare students with severe disabilities for appropriate and meaningful participation in major life activities. Spring semester.

SPED 525  Curriculum Development for Learners with Severe Disabilities II (3 credits)
Prerequisite: SPED 524 with a minimum grade of B
This course provides further development of issues addressed in SPED 524. The course provides knowledge concerning advanced instructional and management strategies that can enhance the quality of life of individuals with severe disabilities. Fundamental concepts/strategies relating to social interactions, employability, constructive use of leisure time, managing behavior, communication interventions, transition planning, academic curricula and medication management are addressed. Development of a full case study, including an IEP and curriculum planning, will be covered. Field-based experience is required. Fall semester.

SPED 527  Early Childhood Learner with Special Needs (3 credits)
This course will examine early childhood special education practices for both the inclusive and substantially separate settings. Areas of concentration will include: the history of early care for children with exceptionalities, a review of normal early childhood development, risk conditions in pre- and post-natal care, assessment of young children, procedures for referral and placement, and developmentally appropriate curriculum strategies. Special attention throughout the course will be placed on the role of families in partnership with caregivers and educators.

SPED 530  Assessment Procedures in Special Education (3 credits)
Prerequisite: SPED 202 with a minimum grade of B; or SPED 510 with a minimum grade of B; or matriculation in the Master's in special education
This course will focus on the administration, analysis and interpretation of standardized and other assessment data, with consideration of
cultural and linguistic applications. Emphasis will be on the developing of instructional programs from the data and the providing of information to professionals and parents. Field experience will be included.

**SPED 542 Behavior Interventions in Bilingual Special Education (3 credits)**
Skills will be developed for understanding how cultural differences affect behavior. The models of behavioral management will include positive peer culture, tribal orientation, cultural symbols, social relations in the classroom and multicultural techniques in addition to the theories of Erikson, Maslow and Skinner, and other psychological and cognitive models. Introductory background information in special education is beneficial to succeed in this course.

**SPED 544 Language Development and Bilingualism (3 credits)**
Skills will be developed for identifying dominance and language proficiency, understanding theories of first and second language learning, relating methods and theories on reading to ESL materials and identifying biases and deficiencies in existing curriculum for linguistic and cultural minority students. Emphasis will be on the effect of culture and language differences on speech and language development. Introductory background information in special education is beneficial to succeed in this course.

**SPED 546 Strategies and Techniques for Adapting Bilingual Resources and Materials for the Special Needs Learner (3 credits)**
Skills will be developed for organizing, planning, teaching and evaluating materials and programs for cultural/racial/linguistic biases and stereotyping, but with an additional focus on sensitivity to bilingualism and biculturalism. Emphasis will be on developing appropriate materials and strategies for meeting the needs of bilingual children in the classroom, the resource room or least restrictive environment. Introductory background information in special education is beneficial to succeed in this course.

**SPED 547 Multiple Roles for Bilingual Teachers of Moderate Special Needs Children (3 credits)**
Skills will be developed for the many roles a change agent might function in, such as educators, consultants, advocates, liaisons, counselors, advisers and trainers. Emphasis will be on the major role of the bilingual special educator as a change agent in the school and community to reduce racial discrimination in regular and special education. Introductory background information in special education is beneficial to succeed in this course.

**SPED 550 Seminar in Special Education (3 credits)**
*Prerequisite: EDMC 530 with a minimum grade of B; and completion of 24 semester hours in the MEd in Special Education program and consent of the graduate coordinator*
An advanced study of major theoretical and contemporary issues influencing special education. Emphasis will be on curriculum, methodology, educational theory and research aspects with classroom application. Each participant will undertake an extensive study of a significant issue in special education.

**SPED 551 Autism Spectrum Disorders (3 credits)**
This course examines the spectrum of disorders associated with Autism, a developmental disability affecting verbal and nonverbal communication and social interaction, generally evident before age 3, that affects a child's performance. The characteristics of the various conditions found within the umbrella of "Autism Spectrum Disorders" will be examined and reviewed in relationship to the specific needs of children with such characteristics. Issues including the emergence of the broad range of associated disorders; trends in treatment; effective behavior management strategies; implications for parents, families, and caregivers; medical factors; early intervention techniques; speech and language difficulties; and school connections will be explored. An emphasis will be placed on techniques to effectively address the behavioral needs of children with Autism Spectrum Disorders in the classroom. The importance of family involvement and strategies for teaming with parents will be emphasized throughout all discussions.

**SPED 555 Field Experience in Special Education (3-6 credits)**
*Prerequisite: Completion of 24 credits in the MEd in Special Education program or consent of the adviser*
A field experience that offers qualified students the opportunity to gain practical off-campus experience in special education. Placements are in public and private agencies and are designed to complement the student's study in special education; a minimum of 10 clock hours per credit is required in the field.

**SPED 559 Study Tour: Multicultural Perspectives in Special Education and Communication (3 credits)**
*Cross Listed with COMD 559 Prerequisite: Dependent on itinerary*
This is a faculty led study tour to investigate how individuals with special needs and/or communication disorders are treated educationally and socially in cultures outside the United States. This course may be repeated for different itineraries.

**SPED 560 Teaching Students with Special Needs through Direct/Explicit Instruction (3 credits)**
This course will provide students with information on the design of instruction for students with diverse learning needs. Procedures will be addressed which examine the relationship between the academic achievement of students and instructional design. Critical instructional design dimensions and teacher delivery include a) knowledge forms, b) the generic instructional set, and c) a principle design network.
These dimensions will be applied and illustrated in the areas of language, beginning reading, mathematics, reading comprehension, expressive writing, content instruction and management.

**SPED 561  Advanced Strategies in Behavior Management (3 credits)**  
*Prerequisite: SPED 302 or SPED 575*  
This course will provide advanced information relative to management strategies for the behavior and emotional problems of all learners. This course will go beyond the basics of behavior management and behavioral analysis. It will focus on interventions from all approaches including the psychodynamic, biochemical and ecological models, including commercial programs. A practical application emphasis will be highlighted.

**SPED 563  Ethical and Legal Issues in Special Education (3 credits)**  
*Prerequisite: SPED 202 or SPED 510 or matriculation in the Master's Degree Program in Special Education or consent of the graduate coordinator*  
This course is designed to assist professionals to develop a critical and reflective sense of how law, ethics and democratic ideals affect the contexts of teaching in general and special education. Topics include the effective educator, school law, rights and responsibilities, ethical codes, current events and best practices. Participants will analyze specific school controversies and the interpretations of legal mandates and ethical codes applications.

**SPED 565  Improving Mathematical Understanding and Instruction Strategies of Educators of Students with Special Needs (3 credits)**  
This course is designed primarily for teachers of learners with moderate special needs. Through problem-solving based instruction, classroom applications of teaching/learning and assigned readings, participants will advance their understanding of mathematics from the MCAS content strands. Participants will work with MCAS mathematics tests to analyze areas of weaknesses for students and develop instructional intervention strategies to assist student learning based on this information.

**SPED 575  Behavior Interventions in Special Education (3 credits)**  
This course will focus on the background, basic principles and techniques necessary for effective development of behavior with special needs students. Emphasis will be placed on behavioral procedures that have been found effective for individual and classroom use, including the ability to systematically observe and record student behavior. Other interventions and their applications to special education settings will also be considered. Introductory background information in special education is beneficial to succeed in this course.

**SPED 582  Technology for Special Populations (3 credits)**  
This course will develop technology skills for teachers to include students with and without disabilities in general and special education program environments. It will focus on the use of low-tech and high-tech methodologies, basic assistive technology assessment skills and augmentative communication. The handicaps. Emphasis will be placed on selecting the appropriate tool to match an identified need. Special education legal requirements for technology will be included.

**SPED 590  Teaching the Gifted Learner (3 credits)**  
This course examines the characteristics and needs of gifted children and adolescents. It addresses concepts of giftedness, identification and assessment of gifted learners, the social-emotional growth of gifted children, underrepresented gifted populations, effective programs for gifted and talented students and culturally responsive teaching of gifted children.

**SPED 593  Practicum: Severe Disabilities (6 or 12 credits)**  
*Prerequisite: Acceptance and retention in the Professional Education Program and satisfactory completion of program requirements and consent of the Field Experience Office in the College of Education and Allied Studies*  
This practicum involves a minimum of 150 hours to earn six credits or a minimum of 300 hours to earn 12 credits. Candidates will teach in the role of the licensure sought under the direction of a qualified cooperating practitioner and college supervisor. This practicum may be repeated for a total of 12 credits. Fall and spring semesters.

**SPED 594  Practicum: Moderate Disabilities (PreK-8) (6 or 12 credits)**  
*Prerequisite: Acceptance and retention in the Professional Education Program and satisfactory completion of program requirements and consent of the Field Experience Office in the College of Education and Allied Studies*  
This practicum involves a minimum of 150 hours to earn six credits or a minimum of 300 hours to earn 12 credits. Candidates will teach in the role and at the level of licensure sought (PreK-8) under the direction of a qualified practitioner and college supervisor. This practicum may be repeated for a total of 12 credits.

**SPED 595  Practicum: Moderate Disabilities (5-12) (6 or 12 credits)**  
*Prerequisite: Acceptance and retention in the Professional Education Program and satisfactory completion of program requirements and consent of the Field Experience Office in the College of Education and Allied Studies*  
This practicum involves a minimum of 150 hours to earn six credits or a minimum of 300 hours to earn 12 credits. Candidates will teach in
the role and at the level of licensure sought (5-12) under the direction of a qualified practitioner and college supervisor. This practicum may be repeated for a total of 12 credits.

Special Education: Other Approved Courses

SPED 514  New Education Policies for Children with Special Needs
SPED 540  Contemporary Issues and Mandates in Bilingual and Special Education

TEACHING ENGLISH AS A SECOND LANGUAGE

TESL 501  Second Language Teaching and Learning – SEI Category 1 (3 credits)
This course will provide training to Massachusetts’ mainstream teachers who have English language learners (ELLs) in their classrooms. Participants will explore theories and models of second language acquisition (SLA). They will learn about the emotional, social and intellectual implications of the process of learning a second language while maintaining the first. Participants will analyze and compare first and second language acquisition and apply strategies related to second language learning in a cross-cultural setting. This course is designed to address the Frameworks and Massachusetts English Language Proficiency Benchmarks and Outcomes. SEI Category 1 approval by the Department of Elementary and Secondary Education.

TESL 504  Sheltered Content Instruction: Principles and Practices – SEI Category 2 (3 credits)
This course is designed to equip teachers with the knowledge and skills to effectively organize and implement content area instruction appropriate for English Language Learners at different levels of English proficiency. It will focus on sheltered content instruction for a variety of proficiency levels and content areas. Course participants will use the Massachusetts English Language Proficiency Benchmarks and Outcomes (ELPBO) and Massachusetts Curriculum Frameworks for their grade level(s) and subject area(s). The course content will be learned through experiential, participatory and process-oriented strategies. SEI Category 2 approval by the Department of Elementary and Secondary Education.

TESL 505  Reading and Writing in the Sheltered Content Classroom – SEI Category 4 (3 credits)
This course will provide an introduction to methodology of content area reading and writing instruction to English Language learners (ELLs). Linguistically diverse students require pedagogical approaches that address particular needs, including oral and native language proficiency. Particular attention will be placed on reading and writing instruction, and study skills in the content areas.

THEATER ARTS

THEA 110  Theater Appreciation (3 credits)
This course introduces the student to the roles of theater artists, the special nature of live theatrical performances, the art of theater as an expression of human experience and to the richness and variety of the heritage of the theater. Theater attendance is required. This course is suitable for students from a variety of majors other than theater seeking a basic knowledge of theater. Either semester. (CFPA)

THEA 115  Play Production (3 credits)
This course introduces the student to the processes involved in the creation of theater art. The student develops an understanding of the aesthetics and conventions of the theatrical event through observation and structured applied experience in the basic practices involved in planning and performing. Theater attendance is required and additional laboratory time is required. Theater arts majors must complete this course within the first 30 credits to receive degree credit. Either semester. (CFPA)

THEA 120  Introduction to Acting (3 credits)
This course is an introduction to and provides practice in the various components of stage acting through an exploration of self-awareness, vocal and physical concerns of the actor, basic acting theory, characterization, script analysis, as well as scene and monologue performances. Theater attendance is required. (Not open to students with a concentration in Theater Arts.) (CFPA)

THEA 140  Theater Performance Practicum (1 credit)
Credit is given for 60 or more hours per semester of rehearsal and performance time in a major production. Audition is required. This course may be repeated. Graded on a (P) Pass/(N) No Pass basis. Either semester.
THEA 157  Movement for the Actor (3 credits)
This course focuses on one of the most important aspects of actor training: movement for the stage, addressing techniques, styles and foundations of movement. Through solo and group exercises, as well as prepared performances, students will gain basic proficiency in proper postural alignment, centering, kinesthetic awareness and response, the variables of movement, the fundamentals and vocabulary of Laban theory and technique and the fundamentals of stage combat.

THEA 162  Costume Production (1.5 credits)
This course introduces students to basic skills used in creating costumes for the theater. The course will cover textiles and fabrics, pattern drafting and the use of commercial patterns, techniques for hand-sewing and the use of different sewing machines in preparation for completing a finished garment. It is intended to be taken with THEA 174 Technical Theater Production in the same term. An additional laboratory of 10 hours to be scheduled is required.

THEA 170  Technical Theater Practicum (1 credit)
Prerequisite: Consent of instructor
Credit is given for 60 or more hours per semester of technical work on a major production. One of the required four practicum credit hours must be earned in this course. Attendance at an organizational meeting is required at the beginning of each semester. This course may be repeated. Graded on a (P) Pass/(N) No Pass basis. Either semester.

THEA 172  Theater Costume Practicum (1 credit)
Prerequisite: Consent of instructor
Credit is given for 60 or more hours per semester of work in costume production for theater and dance. One of the required four practicum credit hours must be earned in this course. Attendance at an organizational meeting is required at the beginning of each semester. Either semester.

THEA 174  Technical Theater Production (1.5 credits)
This course introduces students to basic technical theater production methods and skills in lighting, sound, scenic construction and painting. This course meets once weekly for one quarter, spring term, alternate years. It is intended to be taken with THEA 162 Costume Production in the same term. An additional laboratory of 10 hours to be scheduled is required.

THEA 185  Theater Management Practicum (1 credit)
Prerequisite: Consent of instructor
Credit is given for 60 or more hours per semester of work in audience development, publicity, box office and house management activity in connection with departmental productions. One of the required four practicum credit hours must be earned in this course. Attendance at an organizational meeting is required at the beginning of each semester. This course may be repeated. Graded on a (P) Pass/(N) No Pass basis. Either semester.

THEA 199  First Year Seminar (3 credits)
Prerequisite: Open to all freshmen with a writing placement score of 3 or above or a SAT score of 500 or above or who have completed ENGL 101. Students with 24 or more transfer credits will have this requirement waived.
First Year Seminars (FYS) are writing-intensive, topic courses that introduce students to academic thought, discourse and practices. FYS courses prepare and orient students toward productive and fulfilling college careers by actively engaging them in a specific academic area of interest. Students will improve their writing, reading, research and basic information and technology skills while learning to work both collaboratively and independently. These courses will fulfill the First Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one FYS course may be taken for credit. (CFYS)

THEA 210  Oral Interpretation (3 credits)
Analysis and oral reading of prose, poetry and drama; individual and group forms, theory and practice. (CSPK)

THEA 211  Voice Production for Theatre (3 credits)
This course provides an analysis of each student's vocal habits in performance. Exercises that concentrate on good vocal habits and techniques for the performing artist, training in physical perception of the sounds of "good American speech" and manipulation of the variables of speech for stage interpretation are included. The course provides an introduction to the vocal performance of Shakespeare. Spring semester.

THEA 220  Play Analysis for Production (3 credits)
The objective of the course is to train theater artists in methods of play analysis for production, which can be applied to diverse periods and styles. The works explored range through early Greek, Elizabethan, Neoclassicism, Realism, and Post-Realism. Theater attendance is required. Fall semester.
THEA 222  Asian Theater (3 credits)
This course introduces the student to the theater of several Asian cultures and their aesthetic foundations in myth and ritual. Included are Sanskrit, Chinese, Japanese and other Asiatic traditions. Spring semester. (CFPA; CGCL; CMCL)

THEA 226  Children's Theater (3 credits)
Theater for the child audience: the study of styles and structures for children's theater and analysis of representative theater pieces for children. Opportunity for performing selected pieces. (CFPA)

THEA 230  Creative Dramatics (3 credits)
This course develops creative faculties through the use of dramatic play in laboratory sessions as well as classroom activity. Offered alternate years.

THEA 236  The American Musical Theater (3 credits)
Major trends in the evolution of the American Musical Theater from its origin to the contemporary Broadway musical. Examination of major works of leading composers, librettists, performers, producers and choreographers. (CFPA; CWRT)

THEA 242  Acting I (3 credits)
Development of appreciation and basic skills in the fundamentals of acting. Introduction to established systems of acting and to character and script analysis. Theater attendance is required. Spring semester.

THEA 243  Acting II (3 credits)
Prerequisite: THEA 242 or consent of instructor
Advanced problems and projects, with intensive scene analysis and character analysis. Theater attendance is required. Offered alternate years.

THEA 247  Performing the Musical (3 credits)
The course is a laboratory experience in the performance of musical theater. The student studies the aspects of movement, singing and acting as they are unique to musical theatre performance. Songs, dances and scenes will be staged, directed and critiqued.

THEA 265  Stage Costuming (3 credits)
This course covers principles and techniques of costuming for the stage, including design and construction of costumes and organization of costuming for theatrical production. Meets five hours weekly. Offered alternate years.

THEA 272  Scenography I (3 credits)
Prerequisite: THEA 220 recommended
Theory and practice of designing and planning scenery and lighting for the stage. This course addresses the development of design ideas, period and design research skills and techniques of visual communication of design and production planning and execution. Meets five hours per week. Spring semester.

THEA 278  Scene Design (3 credits)
Prerequisite: THEA 272
Theory and practice of designing for stage productions.

THEA 280  Theater Management (3 credits)
This course covers the business aspects of theatrical production: publicity, programs, financing, ticket sales and house management.

THEA 298  Second Year Seminar (Speaking Intensive) (3 credits)
Prerequisite: _ _ _ _199; Open to all sophomores and juniors who have completed ENGL 101, and the speaking skills requirement. Students with 54 or more transfer credits will have this requirement waived. Cannot be taken if _ _ _ _ 299 is taken for credit.
Second Year Seminars (SYS) are speaking-intensive, topic courses that build on the academic skills and habits introduced in the First Year Seminar. SYS courses engage students in a specific academic area of interest and provide them with the opportunity to reinforce, share and interpret knowledge. Students will improve their speaking, reading, research and basic information and technology skills while building the connections between scholarship and action that are required for lifelong learning. These courses will fulfill the Second Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one SYS course may be taken for credit. (CSYS)

THEA 299  Second Year Seminar (Writing Intensive) (3 credits)
Prerequisite: _ _ _ _199; Open to all sophomores and juniors who have completed ENGL 101 and ENGL 102. Students with 54 or more transfer credits will have this requirement waived. Cannot be taken if _ _ _ _ 298 is taken for credit.
Second Year Seminars (SYS) are writing-intensive, topic courses that build on the academic skills and habits introduced in the First Year Seminar. SYS courses engage students in a specific academic area of interest and provide them with the opportunity to reinforce, share
and interpret knowledge. Students will improve their writing, reading, research and basic information and technology skills while building the connections between scholarship and action that are required for lifelong learning. These courses will fulfill the Second Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one SYS course may be taken for credit. (CSYS)

THEA 326 Children’s Theater Tour (3 credits)
Prerequisite: THEA 226
This course offers students the opportunity to create original theater pieces geared to young audiences. The class will tour schools in Southeastern Massachusetts throughout the semester as part of Bridgewater State University outreach programs. Bridgewater students will have a performing and production experience similar to many professional touring children’s theater companies.

THEA 338 Honors Tutorial (3 credits each semester)
Prerequisite: Consent of the department
Special topics in Theater Arts. Open to Commonwealth and Departmental Honors students. Three hourly meetings weekly. Fall semester.

THEA 339 Honors Tutorial (3 credits each semester)
Prerequisite: Consent of the department
Special topics in Theater Arts. Open to Commonwealth and Departmental Honors students. Three hourly meetings weekly. Spring semester.

THEA 340 Laboratory Theater Production Lab (1 credit)
Prerequisite: Junior or senior standing
Students registering for THEA 347, Laboratory Theater Production, must also register for this associated lab section of the course, THEA 340, Laboratory Theater Production Lab; and they must participate in rehearsals to be arranged over the course of the semester outside of class time. May be taken twice for credit. Fall semester.

THEA 343 Acting for the Camera (3 credits)
Prerequisite: COMM 130 or consent of instructor
This course develops specialized techniques necessary for performance as an actor for film or television.

THEA 346 Speech and Text for the Actor (3 credits)
Prerequisite: THEA 156 and THEA 242
This course will provide comprehensive training in “Standard American Speech.” Students will study textual analysis of dramatic literature with respect to vocal interpretation and a system for achieving stage dialects. Addenda: This course has been changed effective spring 2012. See the Catalog Addenda section of this publication for detailed information.

THEA 347 Laboratory Theater Production (3 credits)
Prerequisite: Junior or senior standing
Analysis and practice in selection of play scripts, acting and directing techniques in rehearsal, culminating in the performance of a production. Entrance to the course is by audition or interview. May be taken twice for credit. Fall semester.

THEA 348 Acting Shakespeare (3 credits)
Prerequisite: THEA 242 and THEA 243; and either THEA 156 or COMM 210
Exploration and practice of performing Shakespeare. Theory analysis of rhythms, timber, phonetics and poetic devices for performance; scenes, monologues and written analysis. Spring semester. Addenda: This course has been changed effective spring 2012. See the Catalog Addenda section of this publication for detailed information.

THEA 349 Comedy on Stage (3 credits)
Prerequisite: THEA 242 or consent of instructor
Analysis and practice of theatrical comedy, including techniques appropriate to the interpretation and presentation of humorous dramatic scenes in the classroom. Offered alternate years.

THEA 376 Stage Lighting (3 credits)
Materials and techniques fundamental to contemporary stage lighting; analysis of the principles of design as they relate to contemporary theater production. Offered alternate years.

THEA 399 Topical Studies (3 credits)
Variable contemporary topics in theater. This course may be repeated for different topics. Either semester.

THEA 421 Theater History I (3 credits)
Trends in dramatic and theatrical developments throughout the western world from ancient Greece to the 17th century. Fall semester. May be taken for graduate-level credit.

THEA 422  Theater History II (3 credits)
Trends in dramatic and theatrical developments throughout the western world from the 17th century to the present. Spring semester. May be taken for graduate-level credit. Addenda: This course has been changed effective spring 2012. See the Catalog Addenda section of this publication for detailed information.

THEA 430  Playwriting (3 credits)
Appreciation of the nature of the play as an art form. Analysis of plays of various types. Practice in writing. May be taken for graduate-level credit.

THEA 431  Directing I (3 credits)
Prerequisite: THEA 220 and THEA 242; or consent of instructor
Basic knowledge and techniques for the beginning director. Play analysis, composition, movement, characterization and rehearsal. Spring semester. May be taken for graduate-level credit.

THEA 432  Directing II (3 credits)
Prerequisite: THEA 220 and THEA 242 and THEA 431; or consent of instructor
This course considers the principles of direction and various theories of direction with practical experience in directing scenes for the stage. May be taken for graduate-level credit.

THEA 442  Acting Styles (3 credits)
Prerequisite: THEA 156 and THEA 242 and THEA 243
Analysis and practice of styles of acting and staging methods of selected historical periods and modern movements considered classics in the development of theater, including the Greek, Elizabethan, Restoration, Georgian and neoclassic periods and schools, and the works of such as Ionesco, Brecht, Beckett, and Moliere. Improvisations, scenes, monologues. Theater attendance is required. May be taken for graduate-level credit.

THEA 455  Audition Techniques (3 credits)
Prerequisite: THEA 156 and THEA 242 and THEA 243
This course explores and practises audition theory and techniques. Audition pieces of various styles and periods are developed and critiqued. Different formats for auditions are utilized. Addenda: This course has been changed effective spring 2012. See the Catalog Addenda section of this publication for detailed information.

THEA 495  Seminar in Contemporary Theater (2 credits)
Prerequisite: Senior standing in theater concentration
This is a required capstone course for students graduating with a concentration in theater. The course deals with issues in contemporary theater and practical matters surrounding careers in theater. Recital, portfolio, or thesis is required. Theater attendance is required. Fall semester. May be taken for graduate-level credit.

THEA 497  Advanced Individual Projects (1-3 credits)
Prerequisite: Junior standing; consent of faculty supervisor; additional course prerequisites depend on project
The student contracts with faculty to explore learning activities of a creative nature beyond the scope of regular course offerings. May be taken for graduate-level credit.

THEA 498  Internship in Theater (3-15 credits)
Prerequisite: Consent of the department; formal application required
A non-classroom experience designed for a limited number of junior and senior majors to complement their academic preparation. This course may be repeated for a maximum of 15 credits. Graded on a (P) Pass/(N) No Pass basis. Either semester.

THEA 499  Directed Study in Theater (1-3 credits)
Prerequisite: Consent of the department; formal application required
Directed study is open to juniors and seniors who have demonstrated critical and analytical abilities in their studies and who wish to pursue a project independently. This course may be taken twice for a maximum of six credits. Offered either semester.

Theater Arts: Other Approved Courses

THEA 156  Voice and Movement for Acting
THEA 160  Stage Makeup
THEA 175   Design Techniques for the Stage
THEA 241   Improvisational Acting

THEA 251   Dance History (3 credits)
Examination of dance as a social and artistic force from primitive to modern times. Class will include lecture and film as well as performance of dances in historical styles.

THEA 356   Advanced Movement for the Actor
THEA 372   Scenography II
THEA 485   Honors Thesis
THEA 496   Seminar in Theater, Dance and Speech
THEA 502   Research
THEA 503   Directed Study

* WOMEN’S AND GENDER STUDIES *

WMST 199   First Year Seminar (3 credits)
Prerequisite: Open to all freshmen with a writing placement score of 3 or above or a SAT score of 500 or above or who have completed ENGL 101. Students with 24 or more transfer credits will have this requirement waived.
First Year Seminars (FYS) are writing-intensive, topic courses that introduce students to academic thought, discourse and practices. FYS courses prepare and orient students toward productive and fulfilling college careers by actively engaging them in a specific academic area of interest. Students will improve their writing, reading, research and basic information and technology skills while learning to work both collaboratively and independently. These courses will fulfill the First Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one FYS course may be taken for credit. (CFYS)

WMST 240   Critical Perspectives in Women’s Studies (3 credits)
Cross Listed with INTD 240
This course introduces students to the historical background and theoretical frameworks of women’s studies. Central to the course is an analysis of the range of feminist scholarship, and the intersections of gender, race, class and sexuality. Students will examine contemporary issues in women’s studies and the implications of feminist thought for society and the individual. Spring semester. (CHUM; CMCL; CWRT)

WMST 298   Second Year Seminar (Speaking Intensive) (3 credits)
Prerequisite: _ _ _ _ 199; Open to all sophomores and juniors who have completed ENGL 101, and the speaking skills requirement. Students with 54 or more transfer credits will have this requirement waived. Cannot be taken if _ _ _ _ 299 is taken for credit.
Second Year Seminars (SYS) are speaking-intensive, topic courses that build on the academic skills and habits introduced in the First Year Seminar. SYS courses engage students in a specific academic area of interest and provide them with the opportunity to reinforce, share and interpret knowledge. Students will improve their speaking, reading, research and basic information and technology skills while building the connections between scholarship and action that are required for lifelong learning. These courses will fulfill the Second Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one SYS course may be taken for credit. (CSYS)

WMST 299   Second Year Seminar (Writing Intensive) (3 credits)
Prerequisite: _ _ _ _ 199; Open to all sophomores and juniors who have completed ENGL 101 and ENGL 102. Students with 54 or more transfer credits will have this requirement waived. Cannot be taken if _ _ _ _ 298 is taken for credit.
Second Year Seminars (SYS) are writing-intensive, topic courses that build on the academic skills and habits introduced in the First Year Seminar. SYS courses engage students in a specific academic area of interest and provide them with the opportunity to reinforce, share and interpret knowledge. Students will improve their writing, reading, research and basic information and technology skills while building the connections between scholarship and action that are required for lifelong learning. These courses will fulfill the Second Year Seminar requirement and may fulfill other requirements for the core curriculum. Each course may fulfill different requirements and topics may change each semester. Only one SYS course may be taken for credit. (CSYS)

WMST 304   The Psychosocial Development of Women (3 credits)
Cross Listed with SCWK 304
This course will provide an introduction to “women's reality” in terms of current research on women's values and needs. The course will cover such topics as power and conflict, sexuality and intimacy, creativity, ethnicity and the effects of oppression as well as the emotional problems which appear to affect women, e.g., depression, eating disorders, etc.

WMST 365 Women in Sports (3 credits)
Cross Listed with PHED 365
Prerequisite: Three core curriculum requirement credits in behavioral science
This course investigates the sport-women relationship from a physiological, historical and socio-cultural perspective. In doing so, it examines images, attitudes and structures that affect the involvement of women in sport and exercise and restrict/enhance their personal and professional potential.

WMST 499 Directed Study (1-3 credits)
Consent of the department chairperson; formal application required
Directed study is open to juniors and seniors who have demonstrated critical and analytical abilities in their studies and who wish to pursue a project independently. This course may be taken twice for a maximum of six credits.

Women's and Gender Studies: Other Approved Courses

WMST 330 Issues and Perspectives in Women's Studies
Cross Listed with INTD 330