Course Descriptions

- Courses are listed alphabetically by discipline. To determine the division and department in which the discipline is included, refer to page 29.
- Consult the Course Index to locate a course by course number, page 184.
- 100-level courses are generally designed for first-year students; 200-level courses are generally designed for second-year students.
- Many courses are offered only once in an academic year, either Fall or Spring semester pending sufficient enrollment.
- Many courses have prerequisites that are either other college courses, developmental courses, or satisfactory scores on the basic skills assessment.

American Sign Language

American Sign Language I
ASL101. An introductory-level course in American Sign Language intended to give an overview of both the language and the culture of the Deaf community. The course focuses on everyday interaction, frequently used signs, basic rules of grammar, and cultural features within the Deaf community. Prerequisite: ENL020 and ENL050 or satisfactory basic skills assessment scores or permission of instructor / 3 credits. Satisfies a Humanities & Fine Arts general education requirement. Offered: Fall, Spring, Summer

American Sign Language II
ASL102. The continued study of American Sign Language with emphasis on increasing vocabulary usage both receptively and expressively. A detailed look into the grammar and structure of American Sign Language with continued exposure to Deaf culture. Prerequisite: ASL101 / 3 credits. Satisfies a Humanities & Fine Arts general education requirement. Offered: Fall, Spring

Anthropology

Introduction to Anthropology
ANT107. An introduction to the principles and procedures of anthropology. The course is divided into two main areas: Physical Anthropology, which covers the physical nature of humans and the evolution of this nature; and Cultural Anthropology, which covers the cultural nature of humans including the origin and development of social institutions. Prerequisite: None / 3 credits. Satisfies a Behavioral & Social Sciences general education requirement. Offered: Fall, Spring

World Archeology
ANT108. This introduction to world prehistory traces our shared human past from the emergence of human material culture to the rise and establishment of ancient states and empires. Special attention devoted to the study of the early civilizations of Western Asia, Europe, China, India, Africa, and the Americas provides for the understanding of how any why the various continents developed their unique civilizations. Archaeological discoveries provide the basis and background for this study. Prerequisite: None / 3 credits. Offered: Fall

Comparative Cultures
ANT211. This course provides an in-depth examination of selected contemporary societies focusing on their customs, language, values, key social institutions and stratification systems. The various internal and external forces affecting political, economic, religious and social cultural dynamics in different, distinct cultures are examined. Students explore the differing social relationships within the family and the community in selected societies. The course also provides a review of selected anthropological case studies from many world cultures. Prerequisite: SOC106 or ANT107 / 3 credits. Offered: Varies

Peoples and Cultures of the Middle East
ANT215. This course is an overview of the cultures of the contemporary Middle East. Emphasis is placed on understanding the region’s cultural, social, political, and religious diversity. Popular and academic conceptions (and misconceptions) of the region are examined and a general history of the region is introduced in order to develop an anthropological perspective on the contemporary culture as observed in the villages, towns, cities, and nations of the region. Prerequisite: ANT107 or SOC106 / 3 credits. Satisfies a Behavioral & Social Sciences general education requirement. Offered: Fall

World Languages

Arabic

Conversational Arabic
ARB100. This basic conversational Arabic course is designed to introduce the non-native speaker of Arabic to the basic skills necessary to developing a working knowledge of spoken Arabic. The emphasis is on listening, speaking, and understanding spoken Arabic. Prerequisite: ENL050 or satisfactory basic skills assessment score / 3 credits. Offered: Fall, Spring

Immersion Study in Arabic Language and Civilization
ARB122. Students study spoken Arabic language and civilization in an Arabic speaking country. Traditional class work is supplemented by field trips and cultural activities. Prerequisite: None / 3 credits. Offered: January Intersession

Art

Drawing I
ART100. Students apply various graphic approaches that may include drawing from still life, landscape, and human figure. Emphasis is on individual creative expression with the objective being the development of perception and understanding of natural phenomena and translation of this information to a two-dimensional surface. Examples of contemporary drawing are appraised in the context of diversity and cultural differences. Prerequisite: ENL010 and ENL040 or satisfactory basic skills assessment score / 3 credits. Satisfies a Humanities & Fine Arts general education requirement. Offered: Fall, Spring, Summer
Design I
ART101. Basic design elements including line, shape, color, texture, value, and composition and their integration on a two-dimensional surface are studied and applied. Students examine the nature and effect of color in its full utilization as a design element in conjunction with the interaction of positive and negative space, optical phenomena, and theories of harmony and visual dynamics. Cultural, ethical, and environmental influences on design from a global perspective will be understood. Prerequisite: ENL010 and ENL040 or satisfactory basic skills assessment score / 3 credits. Satisfies a Humanities & Fine Arts general education requirement. Offered: Fall, Spring

Painting I
ART103. This is an introductory course in painting, exploring a variety of approaches and painting media. A series of landscape, still life, and personal imagery paintings are investigated as both descriptive and imaginative forms of creative expression. The ethical, multicultural and international contributions of paintings are evaluated. Prerequisite: ART100 / 3 credits. Satisfies a Humanities & Fine Arts general education requirement. Offered: Fall, Spring, Summer

Art Appreciation
ART109. This course provides an introduction to the visual arts made by cultures throughout the world from prehistory to the present. It includes European art as well as art from Africa, Asia, and the Americas. Emphasis is placed on how and why art is created, its nature, and the role it plays in society. By studying the fundamental principles, elements, techniques, styles, and vocabulary of art, students explore significant artistic creations ranging in character from the personal, to the political, and religious. Students are required to make an independent visit to a museum. Prerequisites: ENL010 and ENL040 or satisfactory basic skills assessment scores / 3 credits. Satisfies a Humanities & Fine Arts general education requirement. Offered: Fall, Spring, Summer

History of Art: Renaissance to Romanticism
ART126. This course provides an interdisciplinary approach to the art of the western world from the Proto-Renaissance to the Age of Romanticism. Illustrated lectures deal with such topics as general aesthetic trends, the life and work of key artists, ideas guiding their creations, as well as important methods, materials and techniques they employed. Prerequisite: ENL010 and ENL040 or satisfactory basic skills assessment score / 3 credits. Satisfies a Humanities & Fine Arts general education requirement. Offered: Fall, Spring, Summer

You Can Design!
ART130. An online introduction to understanding and interpreting the world around you for the purpose of creating art work. Recognizing and identifying elements of visual language like line, shape, color, texture, and tone lead to applying these elements in the creation of art and design work. Critically evaluating art work and the work of other artists and designers helps nurture confidence in the use of visual language and provides a basis for exploring all forms of visual expression, including drawing, painting, life drawing, sculpture, design, graphic art, web site design and printmaking. Prerequisite: ENL010 and ENL040 or satisfactory basic skills assessment score / 1 credit. Offered: Fall, Spring, Summer

Modern Art: Realism to Surrealism
ART132. In this course, students explore art produced from 1850 to the 1940s, with a focus on European art. Illustrated lectures deal with such topics as general aesthetic trends, the life and work of key artists, ideas guiding their creations as well as themes, styles, materials and techniques employed by individual artists. Prerequisite: ENL010 and ENL040 or satisfactory basic skills assessment score / 3 credits. Offered: Fall

Textile / Fiber Arts I
ART135. Students investigate and develop various approaches to fiber art, using traditional and non-traditional materials. Various techniques are applied with an emphasis on creative expression. Prerequisite: None / 3 credits. Offered: Fall

History of Graphic Design
ART137. This course critically investigates and explores graphic design and visual communication history, materials, techniques and styles, major movements and significant artists and designers. This course requires students to participate in lecture and presentation, and prepare writing and studio projects. Students build a conceptual and visual understanding of vocabulary, applying critical thinking and visual skills in an evaluation of the historical context and the importance of historical reference in graphic design work. Prerequisite: ENL010 and ENL040 or satisfactory basic skills assessment score / 3 credits. Offered: Fall, Spring

Digital Photography
ART139. This is an introductory course in digital photography, exploring both digital capture and aspects of Adobe Photoshop®. This course focuses on developing strong photographic skills, creating dynamic images and an online portfolio. Students explore light in relation to photography, relevant aspects of photographic history and contemporary photography. Prerequisite: ENL010 and ENL040 or satisfactory basic skills assessment score; ART214 recommended / 3 credits. Offered: Fall, Spring, Summer

Introduction to Silkscreen Printing
ART140. Students study elements and apply methods of silkscreen printing. Students create individual printable designs and work on paper and fabric surfaces to create multicolor screen-printed images. Techniques may include a variety of stencil making methods, direct approaches, and photo-emulsion. Prerequisite: ENL010 and ENL040 or satisfactory basic skills assessment score / 3 credits. Offered: Fall, Spring
Art 170. Introduction to Computer Graphics
Prerequisite: ART100 / 3 credits. Offered: Fall, Spring

Art 208. Graphic Design II
This course is a continuation of ART207, which introduces typography, composition, layout, development of graphic concepts, and problem solving and creative thinking. Prerequisite: ART207 / 3 credits. Offered: Spring

Printmaking Techniques
Prerequisite: ART209. The study and development of the fundamental elements of printmaking techniques using a variety of approaches to edition and unique printing. Students cover all aspects of plate preparation and printing. Prerequisite: ENL010 and ENL040 or satisfactory basic skills assessment score / 3 credits. Satisfies a Humanities & Fine Arts general education requirement. Offered: Fall, Spring

Graphic Production and Layout I
Prerequisite: ART210. This course is an introduction to the field of electronic publishing and preparing materials for printed output using modern computer-based technologies. It explores the basics of digital typography and page layout using a professional page layout application to assemble various text-based and graphical elements into cohesive and effective communications using guided and unguided hands-on exercises to produce simple documents. Also covered are the fundamentals of color as they apply to printing. Emphasis is on the mastery of the software and technology. Students are required to spend time outside of class working with the computer software to complete these exercises. This class requires significant skills in computer operation and file navigation/management that can be gained through the prerequisite. Students who believe they have these skills without taking the prerequisite may request a waiver from the instructor. Prerequisite: ART210 / 3 credits. Offered: Spring

Myths, Legends and Symbols in Art
Prerequisite: ART213. In this course, students explore key myths, legends and symbols in the visual arts and the way in which they have been interpreted by artists throughout history. Illustrated lectures include the study of art works which deal with specific divinities, legendary and mythic figures as well as symbolic elements such as particular flowers, fruit, animals, objects, colors and numbers. Disciplines such as music, literature, drama, or cinema, relating to the topics discussed in class, are incorporated into the course. Prerequisite: ENL101 / 3 credits. Offered: Spring

Digital Imaging I
Prerequisite: ART214. This introductory course covers Adobe Photoshop® and scanning techniques and their relationship to graphic design. Students learn from hands-on projects the features of Adobe Photoshop®. Assignments are tailored to a wide variety of users, from graphic designers, artists, photographers, and web page designers. From the first pixel to the finished picture, students gain imaging proficiency and a strong understanding of the program. Prerequisite: ART170 / 3 credits. Satisfies a Humanities & Fine Arts general education requirement. Offered: Fall, Spring

Typography
Prerequisite: ART218. This course is designed to introduce students to the basics of typography. Students demonstrate how to utilize type to solve visual problems in graphic design and visual communication. Students are taught typographic structures and terminology for visual problem solving. This course uses both computer and hands-on methods to address the language of type and its effective usage. By studying the language of type through its history and by its application, students gain strong working knowledge of this essential element in graphic design. Prerequisite: ART170 / 3 credits. Offered: Spring

Portfolio Preparation and Professional Practices for Artists
Prerequisite: ART219. This course covers preparing, critiquing, and presenting a portfolio utilizing existing, personal art work. The portfolio of work is used primarily to support the students transfer to art school. Other topics include writing a resume and cover letter and creating an artist’s statement. Students are expected to have finished artwork for a portfolio. Prerequisite: ART100 & ART101 / 1 credit. Offered: Spring
Astronomy

Fundamentals of Astronomy
AST101. A one-semester science course, with laboratory, that provides an introduction to the principles and theories of contemporary astronomy within and beyond the solar system. The course traces the pathways of observation, conjecture, thought, investigation and discovery to demonstrate how scientific inquiry has enabled the human mind to attain an unprecedented insight to the nature of the universe. (3 class hours / 2 laboratory hours) Prerequisite: (MAT030 or MAT035), ENL020, and ENL050 or satisfactory basic skills assessment scores / 4 credits. Satisfies a Natural or Physical Science general education requirement. Offered: Fall, Spring, Summer

Survey of Human Anatomy and Physiology
BIO105. This is an introductory course of human anatomy and physiology. The course starts with anatomical terms and basic cellular biology and then emphasizes the structure and function of several organ systems. The laboratory portion of the course involves the examination of slides, bones, models, and the dissection of a rat. (This course does not meet the Nursing and Dental Hygiene program requirements for Anatomy and Physiology.) (3 class hours / 2 laboratory hours) Prerequisite: (MAT020 or MAT025), ENL020 and ENL050 or satisfactory basic skills assessment scores / 4 credits. Satisfies a Natural or Physical Science general education requirement. Offered: Fall, Spring, Summer

Human Anatomy and Physiology I (formerly BIO107)
BIO251. A comprehensive systematic study of the human body emphasizing the structure and function of the systems. Part I topics include: cells and tissues, chemistry review, metabolism, the integumentary, skeletal, muscular and reproductive systems with correlated laboratory work. (3 class hours / 2 laboratory hours) Prerequisite: A grade of C or higher in CHM109 or (BIO101 or BIO151) or (CHM101 or CHM151) / 4 credits. Satisfies a Natural or Physical Science general education requirement. Offered: Fall, Spring, Summer

Human Anatomy and Physiology II (formerly BIO108)
BIO252. This course is a comprehensive systematic study of the human body emphasizing the structure and function of several organ systems. Human Anatomy and Physiology II covers the following organ systems: nervous, endocrine, circulatory, lymphatic, respiratory, digestive, and urinary. Lecture topics are correlated with laboratory work. (3 class hours / 2 laboratory hours) Prerequisite: A grade of C or better in BIO107 or BIO251 / 4 credits. Offered: Fall, Spring, Summer

General Biology II (formerly BIO102)
BIO152. This course is a continuation of BIO151. It is designed to acquaint the student with the structure and function of plant and animal systems and finally to provide a view of the organism’s environment and its place therein. Lectures and laboratory sessions are utilized. In lab, the study of animal physiology and ecological systems is stressed. Dissection, physiological testing and some field work provide the basis for learning. (3 class hours / 2 laboratory hours) Prerequisite: A grade of C or better in BIO101 or BIO151 / 4 credits. Satisfies a Natural or Physical Science general education requirement. Offered: Fall, Spring
Survey of Biology
BIO108. This is a survey course of biology, the study of life, in one semester. It is designed to conceptually and experimentally explore the processes that sustain life. Major topics include cell biology, adaptation and evolution, genetics and reproduction, ecology and diversity, taxonomy and classification. The course is not intended for science majors. Prerequisite: (MAT020 or MAT025), ENL020, and ENL050 or satisfactory basic skills assessment scores / 4 credits. Offered: Fall, Spring. Satisfies a Natural or Physical Science general education requirement.

Microbiology
BIO201. An introduction to microorganisms and their activities, for health-related majors. The topics cover cell structure, classification, metabolism, methods of control, antimicrobial drugs, genetics, microbial and host defenses, immunology and applications, representative infectious diseases, and food and industrial microbiology. Independent study is encouraged. The laboratory component includes basic procedures of handling, growing, and identifying microorganisms. (3 class hours / 2 laboratory hours) Prerequisite: A grade of C or higher in (CHM101 or CHM151) or CHM109 and (BIO101 or BIO151) or (BIO107 or BIO251) / 4 credits. Offered: Fall, Spring, Summer

Cell Biology
BIO202. This course provides an introduction to cell structure, function, and physiology. Topics include the function of cellular organelles, enzymes and their role in metabolism and regulation, synthesis of macromolecules, and gene expression and regulation. Prerequisite: A grade of C or better in ENL101, (CHM101 or CHM151) and (BIO101 or BIO151) or (BIO107 or BIO251) / 4 credits. Offered: Fall, Spring, Summer

Introduction to Public Health
BIO204. This course provides an introduction to the public health. Its biomedical basis, including infectious and non-infectious diseases, environmental pollutants, and related factors are discussed. Other topics covered include social, behavioral, and environmental factors that affect public health, Federal, state and international health agencies. Epidemiological principles, surveillance and regulations are addressed with analysis of case studies. Emerging diseases, biotechnology, and new investigative tools are also introduced. Prerequisite: (MAT030 or MAT035) or satisfactory basic skills assessment score, ENL101, and a 4-credit science course with lab component / 3 credits. Offered: Fall, Spring. Satisfies a General Education elective.

Cooperative Work Experience in the Natural Sciences
SC261. This course provides students the opportunity to participate in a laboratory or field project in the natural sciences, under the supervision of a mentor. The course provides the student with the opportunity to apply the principles learned in the classroom to a practical real-world project. The project may be performed on campus, or at an off-campus location. The project outline needs to be approved by the department. Time commitment is based on the number of credits, approximately 70 hours per credit. Prerequisite: Two 4-credit science with labs courses with a grade of C or higher and approval of the department / Variable credits. 1, 2, 3, or 4 credits. Offered: Varies

Business - Accounting

Personal and Small Business Taxes
ACC110. Students learn the kinds of taxes that an individual or small business must report to federal and state governments. Income taxes are the primary focus and students learn to apply the method and principles of tax preparation using a computerized tax preparation software package. Prerequisite: None / 3 credits. Offered: Fall, Spring

Accounting I with Computer Applications
ACC111. (formerly ACC101) Introduction to the accounting cycle: recording transactions, posting to ledgers, preparing work sheets and financial statements. Includes: special journals, inventory valuation, receivables, payables and interest on notes. Hands-on introduction to computerized accounting, solving selected problems using general ledger software including QuickBooks is included. This is the first course of a two-course series (ACC111 and ACC112) intended for A.S. Business Administration concentrations covering the topics of Financial Accounting. Prerequisite: (MAT020 or MAT025) and ENL020 or satisfactory basic skills assessment scores / 3 credits. Offered: Fall, Spring

Accounting II with Computer Applications
ACC112. (formerly ACC102) This course continues ACC111 covering liabilities, long-term assets and sources of equity in partnerships, corporations, and proprietorships. Analysis of accounting information is also covered. Computerized accounting including QuickBooks and Peachtree are used for selected problems as well as the completion of a computerized practice set. This is the second course of a two-course series (ACC111 and ACC112) intended for A.S. Business Administration concentrations covering the topics of Financial Accounting. Prerequisite: ACC111 or ACC101 and (MAT030 or MAT035) or satisfactory basic skills assessment score / 3 credits. Offered: Fall, Spring

Payroll Accounting
ACC115. Payroll Accounting provides an understanding of the laws that affect a company’s payroll structure and practical application skills in maintaining payroll records. Topics covered include: payroll tax laws, payroll tax forms, payroll and personnel records, computing wages and salaries, taxes affecting employees and employers, analyzing and journalizing payroll transactions and completing various federal and state forms. Students prepare business payroll in both a manual and computer format. Prerequisite: ACC111 or ACC201 / 3 credits. Offered: Varies

Financial Accounting
ACC201. Students learn principles of financial accounting with emphasis on service and merchandising businesses. Topics include: the accounting cycle, recording transactions, adjusting accounts and preparing financial statements, inventory valuation, depreciation methods, disposal of assets, receivables, liabilities, investments, and interpreting financial statements of proprietorships, partnerships and corporations. This is a transfer level course in Financial Accounting intended for the Associate of Arts student. Prerequisite: (BUS100 or HRM140), GIT110, (MAT030 or MAT035) and ENL020 or satisfactory basic skills assessment scores / 3 credits. Offered: Fall, Spring, Summer

Managerial Accounting
ACC202. Students learn managerial accounting concepts applied to a variety of businesses with emphasis on job order costing, process costing, cost allocation and cost-volume profit analysis. The budgeting process is examined using master budgets and planning, flexible budgets with standard costs and variances, capital budgets, and managerial decisions. Prerequisite: ACC201 or (ACC111 and ACC112) / 3 credits. Offered: Fall, Spring, Summer

Intermediate Accounting I
ACC221. Refinement of principles. Special valuation problems on cash, receivables, inventories, investments, and other assets. Prerequisite: ACC202 or ACC105 / 3 credits.

Intermediate Accounting II
ACC222. Continues ACC221. Special valuation problems in liabilities and equity, such as interest method in bonds, leases, and cash-flow statements. Prerequisite: ACC221 / 3 credits.
VITA Practicum
ACC263. This Volunteer Income Tax Assistance (VITA) practicum provides an opportunity for students to perform a community service in cooperation with the Internal Revenue Service and the Massachusetts Department of Revenue. The course trains students to assist taxpayers in filling out tax returns. Students also staff centers on Cape Cod, helping local residents complete their tax returns. Prerequisite: ACC101 or ACC111 or ACC201. Co-requisite: ACC110 (may be taken concurrently) / 3 credits. Offered: Spring

Business - Entrepreneurship
Introduction to Entrepreneurship
ENT108. This course provides an overview of the entrepreneurial process of creating businesses, non-profits and other new ventures. Students learn about the roles and attributes of successful entrepreneurs while undergoing a rigorous self-assessment process. Students interview a local entrepreneur, participate in case studies related to new ventures and have the opportunity to learn directly from a variety of speakers invited to class to share their start-up experiences, including ethical dilemmas and other obstacles they will face as entrepreneurs. Prerequisite: None / 3 credits. Offered: Fall, Spring, Summer

Business - General
Introduction to Business
BUS100. Students examine the purpose, role and responsibility of business in American society and gain a broad overview of the functions, institutions, principles and practices of business and other organizations. This course provides a basic foundation for those students who will specialize in business and an opportunity for non-business majors to learn about the business world as a major social institution. Prerequisite: None / 3 credits. Offered: Fall, Spring, Summer

Business Law I
BUS120. A comprehensive guide to the basic principles and practices of Business Law. This includes an introduction to law and its application in the business world. The course covers the law of business ethics, the judicial process, contracts, sales, agency, employment law, partnerships, corporations and other forms of business organization. Prerequisite: None / 3 credits. Offered: Fall, Spring, Summer

Business Administration Cooperative Work Experience
BUS261. Students work in an organizational setting for no less than 150 hours to receive practical training and experience related to the student's academic program. All students enrolled in Business Administration programs are encouraged to take a cooperative work experience. This course is limited to students enrolled in Business Administration programs. Prerequisite: Approval by the Business internship instructor / 3 credits. Offered: Fall, Spring, Summer.

International Business: A European Experience
BUS225. Refer to International Studies.

Business - Management
Supervision
BUS103. This course provides an opportunity to learn effective supervisory practices. Although various concepts and theories are covered to provide a conceptual framework for management and supervision, the emphasis is on the practical experiences of supervisors. Prerequisite: None / 3 credits. Offered Fall, Spring, Summer

Human Resource Management
BUS107. Students learn about the principles and practices of human resource management including staffing, developing, motivating, leading, and controlling the human resources of a business, government, or non-profit organization. Prerequisite: None / 3 credits. Offered: Fall, Spring, Summer

Business Finance
BUS201. This course provides an overview of the principles and practices of financial management. Includes the study of the procurement and effective use of funds in a business, budget preparation, alternative sources of funds, and control of working capital. Prerequisite: ACC202 or ACC105 / 3 credits. Offered: Fall, Spring, Summer

Management
BUS214. Provides an introduction to principles and techniques of management as they relate to business, government, and non-profit organizations. Includes the study of the functions of management: coordinating, problem-solving, decision-making, communicating, planning, organizing, staffing, directing, and controlling. Prerequisite: ENL101 and BUS100 / 3 credits. Offered: Fall, Spring, Summer

Business - Marketing
Marketing
MKT100. This course focuses on the basic principles, problems, and practices in marketing. Students learn marketing strategies, design of marketing mixes, and market planning in a changing environment. Prerequisite: ENL020 or satisfactory basic skills assessment score / 3 credits. Offered: Fall, Spring, Summer

Advertising
MKT103. Students study and analyze the principles and practices of advertising including its functions in our society, its role in business, its challenges, and the creative opportunities that exist in the field of advertising. Emphasis is placed on how and why advertising influences consumer behavior, including a study of the various types of media used. Prerequisite: ENL020 or satisfactory basic skills assessment score / 3 credits. Offered: Fall, Spring

Consumer Behavior
MKT106. Students learn about the various processes and facets of consumer motivation and behavior, including the internal and external influences on buyer behavior. Prerequisite: MKT100 / 3 credits. Offered: Fall, Spring

Customer Service: Concepts and Applications
MKT112. This course provides an overview of customer service concepts and terminology and exposes students to various customer service challenges. Students learn to identify different types of customer behaviors, determine customer needs through active listening, become effective verbal and non-verbal communicators, hone telephone customer service skills, learn how best to handle difficult customers, become aware of how to offer customer service within a diverse organizational environment, take steps to encourage customer loyalty, and practice service recovery. Prerequisite: None / 3 credits. Offered: Fall, Spring
Chemistry

The following two courses (CHM151 and CHM152) constitute a chemistry sequence that covers chemistry without the use of calculus.

General Chemistry I (formerly CHM101)

CHM151. This course emphasizes the atomic nature of matter, fundamental laws and theories of mass and energy, the periodic classification of elements, chemical bonding, nomenclature, kinetic molecular theory applied to solids, liquids and gases, solution chemistry, and descriptive chemistry. Laboratory studies reinforce the principles and concepts studied in lecture and will initiate the student to sound methods of scientific investigation. (3 class hours / 3 laboratory hours) Prerequisite: (MAT020 or MAT025), ENL020, and ENL050 or satisfactory basic skills assessment scores / 4 credits. Satisfies a Natural or Physical Science general education requirement. Offered: Fall, Summer

General Chemistry II (formerly CHM102)

CHM152. Continuation of CHM151. Considers the study of chemical families, chemical kinetics, chemical equilibria, solubility products, electrochemistry, nuclear chemistry and organic chemistry. Laboratory studies reinforce the principles and concepts studied in lecture and include the qualitative analysis of metals. (3 class hours / 3 laboratory hours) Prerequisite: A grade of C or better in CHM101 or CHM151 / 4 credits. Satisfies a Natural or Physical Science general education requirement. Offered: Fall, Spring

Organic Chemistry I (formerly CHM201)

CHM251. This course covers organic nomenclature, bonding, structure, reaction theory, aliphatic hydrocarbons, functional groups, stereochemistry, aromatic hydrocarbons, alkyl halides, and reaction mechanisms. The laboratory emphasizes basic laboratory techniques for separation, purification and synthesis. (3 class hours / 4 laboratory hours) Prerequisite: A grade of C or higher in CHM102 or CHM152 / 5 credits. Offered: Fall

Organic Chemistry II (formerly CHM202)

CHM252. Continuation of CHM251. It includes nomenclature, reaction mechanisms, name reactions, synthesis, organic qualitative analysis, carbanions, oxygen and nitrogen containing functional groups, spectroscopy and biochemical processes. In the laboratory, organic qualitative analysis, synthesis, and spectroscopy of organic compounds are taught. (3 class hours / 4 laboratory hours) Prerequisite: A grade of C or higher in CHM201 or CHM251 / 5 credits. Offered: Spring

Cooperative Work Experience in the Natural Sciences

SCI261. Refer to Biology.

Communication

Voice and Diction

COM100. This course provides the student with basic vocal skills. Particular attention is paid to incorporating techniques to open the voice, breathing, tone production, articulation and diction. This course is designed for the student working to improve their oral skills with an interest towards performance and/or oration. Prerequisite: None / 3 credits. Offered: Fall, Spring

Human Communication

COM103. This course fosters and improves competence in intrapersonal, interpersonal, group and public communication situations. Students demonstrate skills necessary to communicate effectively through exercises and presentations that reflect practical, real-world situations. The purpose of the course is to improve the student’s skill in communication by providing relevant knowledge and opportunity to apply that knowledge. Prerequisite: ENL010 or ESL102 or satisfactory basic skills assessment score / 3 credits. Satisfies a Humanities & Fine Arts general education requirement. Offered: Fall, Spring, Summer

Survey of Mass Communication

COM105. This course explores the history, social impact, forms, and techniques of such media as newspapers, film, books, radio, television, and other expressions of mass culture. The aims of the course are to enable the student to better understand the media-oriented environment in which we find ourselves and to explore various options available as a consumer of public information. Prerequisite: ENL010 or a satisfactory reading comprehension score on the basic skills assessment / 3 credits. Satisfies a Humanities & Fine Arts general education requirement. Offered: Fall, Spring

Radio Broadcasting

COM113. This course is designed to instruct the student in the operation of a radio station. On-air and off-air broadcasting techniques are discussed. Broadcast management, legal requirements, announcing, and copywriting are considered as they relate to specific assignments and duties at a radio station. Decisions involved with programming formats are considered. Students apply knowledge to individual and collective work projects. Students are expected to be proficient in computer file management skills. (60 hours required per semester) Prerequisite: None / 3 credits. Offered: Fall, Spring, Summer

Radio Production

COM114. This course is designed to instruct the student in radio production. Audio production, equipment, engineering, audio editing software, copywriting, broadcast delivery, and production techniques are considered as they relate to specific assignments and duties at a radio station. Students learn digital audio techniques that can be applied to a variety of communications settings such as: podcasting, commercial production, public relations, and audio for the Web. Students apply knowledge to individual and collective work projects. Students are expected to be proficient in computer file management skills. (60 contact hours per semester) Prerequisite: None / 3 credits. Offered: Fall, Spring

Introduction to Video Production

COM131. Students learn video production through lectures and hands-on projects. Specific skills covered include concept development, storyboarding, professional video camera operation, framing, and camera angles. While learning about the equipment and techniques used in video production and post production, students write and produce two projects that are edited on a non-linear system and screened in class for review. Students are expected to be proficient in computer file management skills. Prerequisite: None / 3 credits. Offered: Fall, Spring
Interpersonal Communication
COM201. This course is designed to improve human relationships through an understanding of the principles of effective interpersonal communication. Students participate actively in listening, perceiving, interpreting words and meanings, conflict resolution, assertiveness, nonverbal awareness, developing trusting relationships, and considering the role of the self-concept. Prerequisite: COM103 or ENL101 / 3 credits. Satisfies a Humanities & Fine Arts general education requirement. Offered: Fall, Spring

Small Group Communication
COM202. Small Group Communication is a course designed to provide the student with an understanding of group dynamics, leadership skills, and decision-making and problem-solving models in a variety of small-group settings. Theoretical approaches are applied in practical situations, both in and out of the classroom. Prerequisite: COM103 or ENL101 / 3 credits. Offered: Varies

Public Speaking
COM203. A study of elements of public communication through various one-to-many speaking situations. Emphasizes include communication theory, speaker-audience relationships, speaker resources, speech construction, and delivery. Prerequisite: COM103 or ENL101 / 3 credits. Satisfies a Humanities & Fine Arts general education requirement. Offered: Fall

Persuasive Communication
COM204. A study of the process of persuasion, focusing on the formation of beliefs, attitudes and values, fundamentals of attitude change, audience analysis, the persuasive message, effects of channel and setting, and source credibility. Opportunities are offered for classroom application of the principles and theories discussed. Prerequisite: COM103 or ENL101 / 3 credits. Satisfies a Humanities & Fine Arts general education requirement. Offered: Spring

Oral Interpretation/Readers Theater
COM205. A performance course involving the analysis and aesthetic appreciation of literature (lyric, narrative, drama) through the medium of oral interpretation. This course incorporates techniques for control of self (body and voice), control of the literary object, control of the audience, and critique of solo and group performances. Rehearsals outside of class time may be required; please see instructor. Prerequisite: COM103 or ENL101 or THR103 / 3 credits. Offered: Varies

Communication in Current Settings
COM206. This course addresses special topics of interest for students interested in the communication discipline. Course topics vary from semester to semester. Students are exposed to a diverse range of subject matter to provide familiarity with advanced theories and approaches in communication studies. Prerequisite: COM103 / 3 credits; may be repeated once for credit. Offered: Varies

Argumentation and Debate
COM207. This class provides an overview of the study of argumentation. Students learn argumentation theories and approaches while gaining skills in critical thinking and public speaking. By the end of the semester, students understand how to research and build an argument; how to anticipate, construct, and refute arguments; and how to evaluate the political, moral, and cultural contexts of argumentation. Prerequisite: COM103 or ENL101 / 3 credits; may be repeated once for credit. Satisfies a Humanities & Fine Arts general education requirement. Offered: Fall, Spring

Broadcast Writing and Presentation
COM208. This course is designed to give students a full understanding of how to write for broadcast media, and the skills needed to read copy on the air. Topics covered include news writing, sports writing, commercial writing, public service announcements, editorial writing, as well as questions of news standards, practices, and ethics. Students master writing on deadline, fact checking, and delivering copy in written and verbal form. Prerequisite: ENL101 / 3 credits. Offered: Varies

Event Planning
COM209. Students analyze ways in which organizations communicate their image and message through events and promotions. Students learn organizational communication theory as it relates to events planning and gain practice in planning, critiquing and analyzing events. Prerequisite: COM103 or COM201 or COM202 / 3 credits. Satisfies a General Education elective. Offered: Varies

Advanced Debate
COM213. This class is a continuation of COM207 Argumentation and Debate. It provides in-depth training in intercollegiate competitive debating. Students advance their skills in debate topic analysis and preparation and further strengthen their ability to build clear, organized, and coherent arguments. Students enrolling in this class are required to represent the debate club in various media contexts and/or public debates, as well as intercollegiate debate tournaments. Prerequisite: COM207 / 3 credits. Offered: Varies

Advanced Radio Production
COM231. Building upon the skill based in COM113, students learn advanced radio production skills. Advanced production techniques are discussed and applied to on-air and remote broadcasts. Students learn production software and automation broadcast software in regards to music, commercial programming and voice tracking. Prerequisite: COM113 / 3 credits. Offered: Spring

Mass Communication Cooperative Work Experience
COM262. This course is designed to expand student knowledge through actual work involvement within an area of mass communication. Working with a mentor and collaborating with an employer, the student develops a list of learning objectives that become an integral part of the experience. Prerequisite: COM105, 6 other hours from mass communication suggested sequence list, and permission of co-op coordinator / 1, 2, or 3 credits; may be repeated once; 6 credit maximum.

Computer Science
Computer Programming I: JAVA
CSC110. In this introduction to the field of computer science, students use hands-on projects and teamwork to design, implement, and test programs in Java which can be run on any Java-aware browser. Good programming style, expression, and documentation are emphasized. Object-oriented programming methodology, graphical user interfaces, debugging techniques, and string processing are covered. Java provides a good introduction to programming for students in any academic discipline. (This course does not satisfy the mathematics general education or CSI transfer requirements.) Prerequisite: MAT030 or MAT035 or satisfactory basic skills assessment score / 3 credits. Offered: Fall, Spring
Computer Programming I: C++
CSC120. In this introduction to the field of computer science, students use hands-on projects and teamwork to design, implement, and test programs in C++. Good programming style, expression, and documentation are emphasized. Object-oriented programming methodology, graphical user interfaces, debugging techniques, and string processing are covered. (This course does not satisfy the mathematics general education or CSI transfer requirements.) Prerequisite: MAT030 or MAT035 or satisfactory basic skills assessment score and working knowledge of any programming language / 4 credits. Offered: Fall

Computer Programming II: JAVA
CSC130. Students use hands-on projects and teamwork to design, implement and test large computer programs in Java, with emphasis on good programming style, expression, and documentation. Object-oriented programming methodology, elementary data structures, internal searching and sorting methods, basic graphical animation techniques, exceptions, multithreading, and simple recursion are covered. Students analyze and implement several software development models. (This course does not satisfy the mathematics general education requirement. It does satisfy CSI transfer requirements.) Prerequisite: CSC110 / 4 credits. Offered: Spring

System Software and Assembly Language Programming
CSC210. Students analyze the design and implementation of the components of software used to run a computer including assemblers, compilers, linkers, loaders, operating systems, debuggers, and microprocessors. The general concepts of system software are related to the specific implementation of Intel assembly language (MASM) and Java on a Windows system. Students use hands-on projects and teamwork to design, implement, and test programs in Intel assembly language and to use assembly language procedures in a Java program. (This course does not satisfy the mathematics general education requirement.) Prerequisite: CSC130 / 4 credits. Offered: Varies

Data Structures
CSC230. Through hands-on projects and teamwork, students learn to use data structures and recursion in Java and C++ programs. Abstract Data Types (ADTs) and the actual implementations of data structures including lists, stacks, queues, tables, heaps and trees are studied. Students analyze the theoretical and actual running times of various internal/external searching and sorting methods. Basic software engineering principles are studied and implemented. (This course does not satisfy the mathematics general education requirement.) Prerequisite: CSC120 and CSC130 / 4 credits. Offered: Varies

Construction Technology

Quantitative Skills for Construction
CON100. This course applies fundamental mathematical skills and critical thinking to solve basic construction problems. A review of numbers, fractions, ratios, angles and triangles, weights, measures and conversions, and formulas for calculating area and volume are included. Problem solving uses cases that introduce concepts of the estimating process for selected parts of a construction project including lumber pricing, footings, foundations, girders, sill plates, bridging, floor joists, flooring, wall framing, and roofing. Prerequisite: (MAT030 or MAT035) or satisfactory basic skills assessment score / 2 credits. Offered: Fall, Summer

Blueprint Reading: Construction Trades
CON101. This course introduces fundamentals of reading and interpreting construction documents including plan views, elevations, sections, details, schedules and notes. The symbols and language of construction are studied through the review and study of glossaries, legends and specifications. Application of the arithmetic of construction documents are included. Prerequisite: None / 3 credits. Offered: Spring

Materials of Construction
CON105. Students learn about basic construction materials including properties and limitations, fabrication processes, and their proper application in the construction of residential and small commercial buildings. Sustainability aspects of the materials are discussed as well as characteristics such as material strength, fire resistance, and code conformity. The course is directed to building technology students, the building trades, building supply personnel, local authorities as well as fire and public safety officials. Prerequisite: None / 3 credits. Offered: Spring

Construction Estimating and Practice
CON115. Students explore various systems and methods for estimating construction costs in all phases of residential and commercial buildings. Emphasis is placed on accurate preparation of bids and cost control. Checklists are used to ensure accuracy. Measurements and quantities from actual construction plans and specifications are utilized for all estimating work. Prerequisite: None / 3 credits. Offered: Fall

Understanding and Working with the Massachusetts State Building Code
CON120. Students develop an in-depth working knowledge of the Massachusetts State Building Code, and learn to interpret and apply the code requirements. The course is designed for the general building contractor, for persons engaged in the design and construction of buildings, and for code enforcement officials and firefighters. This course and CON110 may be helpful in obtaining information and skills necessary to pass the Massachusetts Construction Supervisors Exam. Prerequisite: None / 3 credits. Offered: Fall

Architectural Drafting and Construction Drawing
CON125. This course is intended to provide students with practical experience in preparing working drawings for building construction. This course utilizes concepts developed in CON130 and CON101. A complete set of working drawings are prepared over the course of the semester. Prerequisite: CON101 and CON130 / 3 credits. Offered: Varies

Computer Aided Drafting I
CON130. This course is a first course in computer aided drafting including an introduction to AutoCAD, drawing, editing drawings, applications, using advanced functions, producing hardcopy, and customizing AutoCAD. The emphasis of this course is in developing drafting techniques using the computer as the drafting tool. Specific topics include system set up, 2-D drawing, editing drawings, multiview drawing, orthographic views, dimensioning, sectional views, and graphic patterns. Prerequisite: None / 3 credits. Offered: Fall, Spring, Summer
Computer Aided Drafting II
CON135. This course is a second course in computer aided drafting. A brief review of CON130 is followed by the following topic development: threads and fasteners, auxiliary views, revolutions, shop processes, working drawings, isometric and three dimensional drawings, rendering, and expanding AutoCAD applications. Prerequisite: CON130 / 3 credits. Offered: Spring

Architectural Computer Aided Drafting I
CON225. This course develops a student’s architectural drafting techniques utilizing personal computers as the tool for the computer aided design (CAD) system. Residential construction is the focus in drawing tasks. Students review CAD techniques, draw building elevations and plan individual rooms by drawing walls, doors and windows. Students use accepted conventions for lettering, dimensioning, noting and titling. Prerequisite: CON130 / 3 credits. Offered: Fall

Criminal Justice

Substantive Criminal Law
CRJ101. This course is a survey of criminal law and evidence with emphasis on Massachusetts laws and recent court rulings. Prerequisite: None / 3 credits. Offered: Fall

Procedural Criminal Law
CRJ102. This course emphasizes the evolution of due process as it affects functions and duties of law enforcement officers. Prerequisite: None / 3 credits. Offered: Spring

Criminology, Theory and Practice
CRJ105. This course provides a general overview of the major theories of crime and criminal behavior, as well as the scope and nature of the criminal justice system and the problem of crime. Prerequisite: None / 3 credits. Satisfies a Behavioral & Social Sciences general education requirement. Offered: Fall, Spring

Introduction to Corrections
CRJ116. This course is a general overview of corrections in the United States today, concentrating on the history, organization and administration of corrections, as well as sentencing, corrections law, career issues, tactical operations and the future of corrections. Prerequisite: None / 3 credits. Offered: Spring

Contemporary Policing
CRJ125. This course is a general overview of policing in the United States today, concentrating in history, organization - public and private - as well as personal issues, police operations, and critical and emerging issues. Prerequisite: None / 3 credits. Offered: Fall, Spring

Criminal Evidence
CRJ130. This course is designed to introduce the basic concepts of criminal evidence as applied in the criminal justice environment. It includes a description of the trial process and types of evidence. The course presents principles relating to the United States Constitution and those principles relating to the law enforcement professional as a witness. Prerequisite: None / 3 credits. Offered: Fall, Summer

Terrorism
CRJ135. This course acquaints students with the concept of terrorism at both the international and domestic level, examining the history of terrorism, terrorism today, and terrorism in the future. Prerequisite: ENL050 or satisfactory basic skills assessment score / 3 credits. Offered: Spring, Summer

Principles of Investigation I
CRJ206. This course examines the organization and functions of investigative agencies, preparation and presentation of accurate written and verbal reports, courtroom presentation of evidence, and elements of legal proof. Prerequisite: All Level I Criminal Justice courses / 3 credits. Offered: Fall

Principles of Investigation II
CRJ207. This course is a continuation of CRJ206. It introduces the students to the collection, presentation, and analysis of physical evidence, and investigation of specific offenses. Prerequisite: CRJ206 and all Level I Criminal Justice courses / 3 credits. Offered: Spring

Ethical Issues in Criminal Justice
CRJ210. This course examines ethical principles as they apply to the many practical problems which confront criminal justice professionals in the performance of their duties and responsibilities. Wherever possible, concrete case studies are used to illustrate ethical reasoning. Prerequisite: All Level I Criminal Justice courses / 3 credits. Offered: Fall

Crisis Intervention for Criminal Justice Professionals
CRJ220. This course explores the relationship of police and crisis intervention. Special emphasis is placed upon the development and utilization of helping skills in dealing with crisis situations. Prerequisite: All Level I Criminal Justice courses / 3 credits. Offered: Fall

Juvenile Justice
CRJ221. This course is designed to introduce students to the Juvenile Justice system, the processes and the law pertaining to the system by presenting a thorough examination of the social, historical, and legal context within which delinquency and Juvenile Justice practice occurs. Prerequisite: All Level I Criminal Justice courses / 3 credits. Offered: Spring

Selected Issues in Criminal Justice
CRJ240. The course seeks to explore issues that are currently facing the criminal justice system. This course introduces the student to human and cultural relations that affect the criminal justice system. Prerequisite: All Level I Criminal Justice courses / 3 credits. Offered: Spring

Criminal Justice Cooperative Work Experience
CRJ261. A supervised work/learning experience in a local criminal justice agency combined with a seminar component for student feedback and evaluation. Limited to students enrolled in the Criminal Justice program. Required for all Criminal Justice majors. Prerequisite: All Level I Criminal Justice courses / 3 credits; may be repeated once. Offered: Fall, Spring, Summer

Culinary Arts
Refer to Hospitality Management

Dance
Refer to Theater and Dance.
Dental Hygiene

Oral Tissues I
DEN101. In this course, designed for first semester dental hygiene students, the student learns the basic anatomy of the teeth and dental nomenclature. This study is further developed by concentrating on functions and forms of teeth with emphasis on eruption dates of both primary and permanent dentitions and root morphology of permanent teeth. An introduction to general histology and embryology of the face and oral cavity completes the course. Prerequisite: ENL020 and ENL050 or satisfactory basic skills assessment scores and CHM109 or equivalent / 2 credits. Offered: Fall

Oral Tissues II
DEN102. In this course, designed for second semester dental hygiene students, the student learns the basic histology of the teeth and supporting structures of the oral cavity. The second part of the course covers anatomy of the head and neck with emphasis on bones of the skull, muscles, nerves, and blood supply to the oral structures. Prerequisite: DEN101 / 2 credits. Offered: Spring

Principles of Oral Radiology
DEN103. This course provides the student with information concerning: principles of x-ray radiation; components of the x-ray tube; equipment usage, safety, and maintenance; parallel/bisecting-angle and special patient techniques; digital radiography; radiographic interpretation; manual/automatic processing; and infection control information. Lab experience includes: parallel and bisecting angle technique; digital radiography; panelipse; special patient techniques with automatic and manual processing equipment. (2 class hours / 3 laboratory hours) Prerequisite: CHM109 / 3 credits. Offered: Fall

Community Dental Health
DEN105. Community Dental Health is the science and art of promoting oral health and preventing oral disease in a community setting. Through this course, the student acquires the knowledge, attitudes, skills, and behaviors necessary to promote dental health and prevent dental disease through organized community-based programs. Students are introduced to basic principles of research methodology and biostatistics, epidemiological indices, population needs, and community health planning methods for dental education of the public. Prerequisite: DEN123 and DEN128 / 2 credits. Offered: Spring

Dental Hygiene I
DEN121. This first course introduces the student to the profession of dental hygiene, the dental hygiene code of ethics, principles of infection and exposure control, and the CDC Bloodborne Pathogens Standard. The dental hygiene process of care with an emphasis on the assessment phase is presented. Oral hard and soft deposits are discussed along with an introduction to safety and emergency procedures. Additionally, oral health education and oral physiotherapy techniques are introduced. Prerequisite: ENL020 and ENL050 or satisfactory basic skills assessment score and CHM109 / 2 credits. Offered: Fall

Dental Hygiene II
DEN123. This course continues the study of the dental hygiene process of care begun in DEN121. The dental hygiene diagnosis and treatment care plan are introduced as well as specific treatment modalities. Emphasis is placed on the dental hygiene care and management of patients at each life stage and the management of the medically compromised patient. Additionally, individuals with physical, sensory and mental disabilities are studied. Prerequisite: DEN121 / 2 credits. Offered: Spring

Clinical Dental Hygiene I
DEN126. The principles, protocols and components of the dental hygiene process of care described in DEN121 are applied in a pre-clinical setting. Additionally, ergonomics, patient/operator positioning, selective polishing and instrumentation skills with assessment and debridement instruments are introduced and practiced on both typodonts and student partners. Instrument sharpening skills are developed. Prerequisite: ENL020 and ENL050 or satisfactory basic skills assessment scores / 3 credits. Offered: Fall

Clinical Dental Hygiene II
DEN128. Previously acquired knowledge, skills and values applicable to comprehensive dental hygiene care are reviewed. Components of the dental hygiene process of care presented in Dental Hygiene II are applied in a clinical setting. The primary focus of this course is for students to increase and refine their skills in the areas of assessment, dental hygiene diagnosis, care planning, implementation and evaluation while providing comprehensive care to patients of various population groups in a safe and ethical manner. Prerequisite: DEN121 and DEN126 / 4 credits. Offered: Spring

Pharmacology for Dental Hygiene
DEN200. This course addresses the basic principles of pharmacology and anesthesiology and applies this knowledge to the treatment of dental hygiene patients. The student applies the knowledge of drugs, their actions, and the use of the drugs used in dentistry and their impact on patients. The course content includes the physical and chemical properties, preparations, mode of administration, and effect on body systems, as well as reference to medical emergencies associated with dental treatment. Prerequisite: DEN121 or permission of the instructor / 3 credits. Offered: Spring

Oral Pathology
DEN205. This course incorporates important aspects of general pathology and their relationship to the oral cavity. The course stresses comprehensive oral examination procedures, recognition of deviations from the normal, and clinical aspects of pathological processes affecting the patient as a whole and the oral cavity. Prerequisite: DEN121 and DEN126 / 3 credits. Offered: Spring

Dental Materials
DEN209. A study of the science of dental materials including the physical, chemical, and biological properties, manipulation, and care of materials used in the prevention and treatment of oral disease. The scientific and clinical properties of gypsum materials, impression materials, waxes, porcelain, dental abrasives, cements, resins, and metals used in dentistry are discussed in lecture and manipulated in laboratory sessions with special emphasis on the materials within the scope of the practice of Dental Hygiene. (2 class hours / 3 laboratory hours) Prerequisite: CHM109 and DEN101 / 3 credits. Offered: Fall

Periodontics
DEN211. This course is an advanced study of the periodontium and its relationship to clinical practice. Incorporating current research, emphasis is placed on the pathogenesis of periodontal disease, the relationship between periodontal health and systemic health, risk factors, methods of assessment, and current therapies for treatment and maintenance of the periodontal patient. Prerequisite: DEN123 and DEN128 / 2 credits. Offered: Fall

Dental Hygiene III
DEN230. Advanced procedures and related specialties are discussed and integrated into the clinical experience. Some of the topics that are discussed include implants, dental specialties, health promotion, risk assessment, and the use of advanced technologies in dental hygiene practice. Prerequisite: DEN123 and DEN128 / 2 credits. Offered: Fall
Clinical Dental Hygiene III
DEN236. This course, designed for third semester dental hygiene students, consists of clinical sessions in which advanced clinical procedures and advanced radiographic procedures are integrated into the clinical experience. Prerequisite: DEN123 and DEN128 / 4 credits. Offered: Fall

Dental Hygiene IV
DEN232. In lecture, the students are introduced to areas of private practice: ethics, practice acts, national and regional licensure, professional organizations, practice management, recalls and computer use. Discussions include resume writing, the job interview and the future of dental hygiene. Prerequisite: DEN230 / 2 credits. Offered: Spring

Pain Management in Dental Hygiene Practice
DEN237. This course provides a comprehensive study of local dental anesthetics administered in the dental hygiene profession. Utilizing lecture and lab components, the student learns to safely administer topical and local dental anesthetics. This course covers Massachusetts Rules and Regulations 234CMR3.09-3.14, and the requirements in the administration of local dental anesthetics. Prerequisite: DEN123 and DEN129 / 2 credits. Offered: Fall

Clinical Dental Hygiene IV
DEN238. This course, designed for fourth semester dental hygiene students, consists of clinical sessions which provide further refinement of clinical skills emphasizing the role of expanded duties in therapy, prevention, and control of periodontal disease. Prerequisite: DEN230 and DEN236 / 4 credits. Offered: Spring

Developmental Education - English
Developmental education credits cannot be counted in the determination of the academic credits required for the A.A. and A.S. degrees.

Students whose first language is not English or whose basic skills assessment scores place them into developmental / English courses are advised to consider enrolling in the appropriate ESL course. Please refer to English for Speakers of Other Languages/English for Academic Purposes (ESOL/EAP) on page 155 of this catalog.

Preparation for College Reading
ENL010. This course is the first course in a two-course sequence designed for the entering college student whose reading comprehension skills are at a pre-college level. Vocabulary development is an integral component of this course. Students become effective learners by reading regularly, making oral and written responses to readings, having class discussions, and learning to self-monitor their comprehension. Prerequisite: Recommendation by basic skills assessment score. Letter grade or Pass-Fail / 3 non-degree credits. Offered: Fall, Spring

College Reading and Study Skills
ENL020. This course is the second course in a two-course sequence designed to prepare students for the demands of collegiate study. Students read from textbooks, novels, expository works, and media (newspapers, magazines). Students practice the following study skills: reading comprehension monitoring, systematic approaches to textbook study, listening, note taking and preparation for test taking. Prerequisite: Appropriate score in Reading Comprehension on the Computerized Placement Test or a grade of C or better in ENL010. Letter grade or Pass-Fail / 3 non-degree credits. Offered: Fall, Spring, Summer

Essential Writing Skills
ENL040. This course is designed for the student who requires writing skills essential for academic and career success. Basic sentence level skills such as sentence formation, punctuation, and sentence combination are emphasized within the context of paragraph development. Prerequisite: Placement test score of greater than or equal to 40 on Reading Comprehension and less than or equal to 53 on Sentence Skills / 3 non-degree credits. Offered: Fall, Spring, Summer

Sentence Strategies
ENL045. This is an intensive developmental writing course focusing on eliminating certain repeated errors appearing in adult Standard American English (SAE) writing, particularly in the following areas: sentence types and expanded combinations including relevant punctuation, subject-predicate and pronoun agreements, word order. Students engage in intensive practice using sentences as independent structures and within paragraphs and short essays. Prerequisite: Appropriate CPT score (RC68+; SS 68-87), instructor’s screening / 2 non-degree credits. Offered: Varies

Foundations in Writing
ENL050. This course is a one-semester course in which students develop and demonstrate knowledge of fundamental composing processes by composing paragraphs and essays, mastering basic sentence types and construction, and using standard American English grammar, usage and mechanics. Prerequisites: Appropriate score on the sentence skills assessment or a grade of C or better in ENL040 and appropriate score on the reading skills assessment or a grade of C or better in ENL010. Letter grade or Pass-Fail / 3 non-degree credits. Offered: Fall, Spring, Summer

Developing Vocabulary
ENL080. This mini-course is designed to expand the students' general vocabulary and provide intensive practice in major skills of word attack through structural analysis and contextual clues. Prerequisite: None. Pass-Fail / 1 non-degree credit. Offered: Varies

Study Skills
ENL082. This mini-course is designed to help students understand more about their learning styles, improve their study skills and develop the self-discipline they need to be successful college students. This concise, practical course focuses on the key skills essential to college success: listening, note taking, reading, writing and taking exams. Prerequisite: None. Pass-Fail / 1 non-degree credit. Offered: Varies

Basic Grammar Review
ENL083. This mini-course helps students understand the basic structure of English grammar and punctuation. This course focuses on key elements of grammar and punctuation. Prerequisite: None. Pass-Fail / 1 non-degree credit. Offered: Varies

English as a Second Language I
ESL010. Refer to English for Speakers of Other Languages.
Developmental Education - Math
Developmental education credits cannot be counted in the determination of the academic credits required for the A.A. and A.S. degrees.

Fundamental Arithmetic
MAT010. A mastery-based course in basic arithmetic operations and techniques designed to provide a thorough coverage of whole number arithmetic, fractions, and decimals. Applications are used extensively to develop problem-solving techniques. The course focuses on basic computational skills, study skills, and background needed to succeed in subsequent courses. Students use the language of arithmetic to understand basic arithmetic vocabulary and to read/write simple quantitative statements. Prerequisite: None. Recommendation by basic skills assessment score. Letter grade or Pass-Fail / 3 non-degree credits. Offered: Fall, Spring, Summer

Prealgebra
MAT025. A fundamental course in prerequisite algebraic topics designed to help prepare students for the study of introductory algebra and its applications. Topics include: introduction to, operation with, and application of whole numbers, integers, fractions, and decimals; exponentiation, rooting, order of operations, ratios, rates, proportions, unit conversions, percents and their applications; an introduction to algebraic expressions and equations, applications of algebraic expressions and equations, geometry, and measurement. (5 contact hours) Prerequisite: MAT010 or satisfactory basic skills assessment score / 3 non-degree credits. Offered: Fall, Spring, Summer

Algebra for Non-STEM
MAT035. An algebra course designed to prepare students for college-level non-STEM math courses, address the quantitative needs of other disciplines, and develop the quantitative reasoning skills for citizenship and workplace. Concepts are introduced through meaningful applications and in-class activities. Topics include proportional reasoning, scientific notation, creating and interpreting tables and graphs, solving linear and quadratic equations algebraically, solving systems of linear equations, linear and non-linear functions, and creating mathematical models of real-world problems using technology. (5 contact hours) Prerequisite: MAT025 or satisfactory basic skills assessment score / 3 non-degree credits. Offered: Fall, Spring, Summer

Intermediate Algebra
MAT040. A course in intermediate algebra designed to help prepare students for non-precalculus track mathematics. Topics include: factoring, rational expressions, rational exponents and roots, quadratic functions, variation, conic sections, relations and functions, exponential functions, and the development of word problem analysis and solution. Prerequisite: MAT030 or satisfactory basic skills assessment score. Letter grade or Pass-Fail / 3 non-degree credits. Offered: Fall, Spring, Summer

Elementary Algebra for STEM
MAT041. This course introduces the basic concepts in algebra necessary for students who plan to take intermediate algebra for STEM (Science, Technology, Engineering, and Mathematics). Topics include: properties and operations on real numbers, linear equations, interval notations, inequalities, absolute value, graphing, function notations, linear systems, exponents, polynomials, factoring, and word problem analysis. (4 contact hours) Prerequisite: MAT025 or satisfactory basic skills assessment score / 3 non-degree credits. Offered: Fall, Spring, Summer

Intermediate Algebra for STEM
MAT045. This developmental course prepares students for College Algebra, which is essential to the Natural Sciences, Technology, Engineering, and Mathematics curriculum. Topics include: graphing, polynomials, factoring, rational expressions, rational exponents, quadratic equations, variation, conic sections, functions, and logarithms. Development of problem solving skills is emphasized throughout the course. (5 contact hours) Prerequisite: (MAT030 or MAT041) or satisfactory basic skills assessment score / 3 non-degree credits. Offered: Fall, Spring, Summer

Introduction to Young Children with Special Needs (Birth-8 years)
ECE105. This course focuses on children with special needs in early childhood settings. Based on a developmental perspective, course content includes the various areas of exceptionality in terms of causes, characteristics and general intervention, strategies for adapting the learning environment, modifying instruction and making curriculum accessible to all children through inclusion of those with special needs. Attention is given to State and Federal Legislation, the referral process, community resources, and effective ways to work with families. (6 hours observation/field work) Prerequisite: ECE100 or PSY201 / 3 credits. Offered: Fall, Spring

Child Growth and Development
ECE110. This course examines child development from conception to age 9 by considering the complex interaction between heredity and environmental factors. Children's physical, social, emotional, and cognitive development are discussed, as well as the implications for developmentally appropriate practice. It includes the theones of Erikson, Piaget, and Vygotsky. Students are required to observe children in a child care setting. This course is restricted to applicants for State certification as a teacher of infants, toddlers, and/or preschool children. Prerequisite: None / 3 credits. Offered: Fall, Spring, Summer

Literacy and the Young Child
ECE115. This course describes how children acquire language and literacy, and how teachers can design classrooms and experiences to promote oral and written language development. The course stresses planning for individual children, including children with special needs and English language learners, as well as understanding the importance of the child's family in language and literacy development. (6 hours observation/field work) Prerequisite: None / 3 credits. Offered: Fall, Spring

Teaching Infants and Toddlers
ECE200. This course emphasizes the development needs of infants and toddlers. Special focus includes planning curriculum for the very young, working with parents, special development needs of infants and toddlers, and planning their environment. (6 hours observation/field work) Prerequisite: PSY201 or ECE100 / 3 credits. Offered: Fall, Spring
Preschool Curriculum Planning
ECE201. This course explores curriculum planning for inclusive preschool settings. Participants develop a framework for planning, implementation, organization, and evaluation of activities in content areas such as art, math, science, music, language arts, and free play. The course emphasizes high-quality, developmentally appropriate practice, aligned with state and national standards and guidelines. (10 hours observation/field work) Prerequisite: ECE100 or PSY201 / 3 credits. Offered: Fall, Spring

Advanced Curriculum Development: Creative Experiences for Early Childhood Education
ECE202. Experiences at both the adult and child level designed to help students understand the creative process and appropriate ways of encouraging creativity in young children in inclusive settings. Students are required to try out their ideas with children. The emphasis is on art, as well as science, math, language arts, music, movement, and dramatic play. The course also explores the influence of international models, such as Reggio Emilia. (6 hours observation/field work) Prerequisite: ECE201 / 3 credits. Offered: Fall, Spring

Field Experience in Early Childhood Education
ECE206. This course gives students the opportunity to complete supervised field hours in a licensed and approved early childhood education setting. The course emphasizes high-quality developmentally appropriate practice, aligned with state and national standards and guidelines, including the National Association for the Education of Young Children (NAEYC) Professional Development Standards. Students must submit a CORI application prior to beginning the lab hours. (20 hours observation/field work, 5 class hours) Prerequisite: ECE201 and ECE200 or ECE201 / 1 credit; may be repeated for a maximum of 3 credits. Offered: Fall, Spring

Curriculum Strategies for Teaching Math and Science to Young Children
ECE211. Explore strategies, activities, and materials for teaching math and science to children in inclusive preschool and kindergarten settings. The course focuses on state and national standards and guidelines, as well as the constructivist approach to teaching science and math. (6 hours observation/field work) Prerequisite: PSY201 / 3 credits. Offered: Various

Classroom Management: Skills and Strategies for Early Childhood Teachers
ECE221. This course explores classroom management strategies for inclusive toddler, preschool, and after-school settings; including creating a pro-social environment, resilience and risk factors, and using a positive, respectful approach to guiding children based on knowledge of child development. (6 hours observation/field work) Prerequisite: PSY201 or ECE110 / 3 credits. Offered: Fall, Spring

Practicum in Early Childhood Education Preschool
ECE230. This course provides the student with the opportunity to work directly with infants, toddlers, or preschool children in an inclusive early childhood education program. Coursework includes 150 hours (12 hours/week minimum) working in a Massachusetts licensed or NAEYC accredited child care facility, as well as a weekly seminar class. The practicum meets state requirements for 9 months child care experience. (150 field work hours; 14 class hours) Prerequisite: ECE105, ECE201, PSY201, (ECE200 or ECE202) & a minimum 2.0 GPA in ECE courses / 6 credits. Offered: Fall, Spring

Selected Topics in Early Childhood Education
ECE242. This course serves as a vehicle to either deepen students’ knowledge of subjects addressed in Early Childhood Education introductory courses or explore issues outside the traditional curriculum. Prerequisite: Any introductory-level social and/or behavioral science course / 1, 2, or 3 credits; may be repeated for credit; 3 credits maximum. Offered: Fall, Spring, Summer

Administration of Early Childhood Programs
ECE290. This course is designed to guide Early Childhood professionals in establishing or reinforcing existing programs for young children, to give a working knowledge of the concepts, ideas and methods necessary to administer these programs, including Mass. Dept. of Early Education and Care (EEC) regulations, budgets, and other financial issues, legal issues, family communication, and staff issues (hiring, firing, supervision, turnover, training). Meets EEC requirements for Director I. Note: Students should contact the Early Childhood Education Coordinator prior to registering for this course. Prerequisite: ECE201 or ECE202 or ECE221 or ECE230 or ECE291 / 3 credits. Offered: Fall

Leadership and Management in Early Childhood Education
ECE291. This course explores administrative issues relating to leadership in Early Childhood Education: management styles, staff development and supervision including teacher training, staff collegiality, retention and evaluation, as well as collaboration with parents and community. This course meets Director II specifications for EEC certification. Prerequisite: ECE110 or PSY201 / 2 credits. Offered: Fall

Earth Science
Introduction to Earth Science
ESC101. This is a one-semester, liberal arts and sciences course with a laboratory, designed to introduce the concept that planet Earth represents a dynamic, integrated system. The nature and characteristics of the atmosphere, lithosphere, hydrosphere, and biosphere are considered. (3 class hours / 2 laboratory hours) Prerequisite: (MAT030 or MAT035), ENL020, and ENL050 or satisfactory basic skills assessment scores / 4 credits. Satisfies a Natural or Physical Science general education requirement. Offered: Fall, Spring

Fundamentals of Oceanography
ESC105. A general introduction to the scientific study of the ocean environment including the physical, chemical, geological and biological properties of the sea. Some field trips may be required. This course is intended for non-science majors. (3 class hours / 2 laboratory hours) Prerequisite: (MAT030 or MAT035), ENL020, and ENL050 or satisfactory basic skills assessment scores / 4 credits. Satisfies a Natural or Physical Science general education requirement. Offered: Fall, Spring, Summer

Economics
Principles of Macroeconomics
ECO117. This course is an introduction to the principles of macroeconomics including current economic problems, national income, employment, prices, monetary and fiscal policy to stabilize the economy. Emphasis is given to economic growth and the international economy. Prerequisite: None / 3 credits. Satisfies a Behavioral & Social Sciences general education requirement. Offered: Fall, Spring, Summer
Principles of Microeconomics
ECO118. Principles of microeconomics including functioning of competitive and non-competitive markets, price and wage theory, labor and agricultural economics, income distribution, and comparative economic systems. Prerequisite: None / 3 credits. Satisfies a Behavioral & Social Sciences general education requirement. Offered: Fall, Spring, Summer

Investments
ECO119. The course is intended to provide the student with an introductory fundamental understanding of the theoretical and practical concepts of investments. Areas that are covered are valuations of securities and debt instruments, risk/reward in decision making, construction of portfolios, and practical applications in investment strategies. The course enables the student to prepare for a career in finance, as well as to learn how to make rational decisions for personal investing. Prerequisite: (MAT030 or MAT035) / 3 credits. Offered: Varies

Emerging Markets Economics
ECO155. This interdisciplinary, hands-on course is designed to provide students with the understanding of the workings of the economy and the financial markets. It acquaints students with the tools and concepts of finance and macroeconomics and the ability to apply them to study the stock markets in an emerging economy. Prerequisite: None / 3 credits. Satisfies a Behavioral & Social Sciences general education requirement. Offered: Fall, Spring

Global Economics
ECO157. This course is designed to introduce students to contemporary global economic issues, as well as economic tools necessary to analyze them. Primary focus of the course addresses international trade while emphasizing the importance and practical applicability of related issues in international finance and international relations in day-to-day life. Prerequisite: None / 3 credits. Satisfies a Behavioral & Social Sciences general education requirement. Offered: Spring

Environmental and Natural Resources Economics
ECO160. This course uses the basic tools of economic analysis to focus on issues pertaining to the natural environment and its resources. The topics covered include economic externalities, public goods, property rights, market failure, air and water pollution, solid waste management, sustainability concepts, the role of government, and benefit-cost analysis in social planning. Prerequisite: None / 3 credits. Offered: Fall

Education
Foundations of Education
EDU101. This course examines the philosophical, sociocultural, historical, political, and developmental foundations of elementary education in the United States, as well as current issues and future trends. A 40-hour field-based experience in an elementary classroom (grade 1-6) is required. This course meets state Elementary Education Transfer Compact requirements. Students enrolling in this course must undergo a CORI (Criminal Offender Record Information) check. (2 class hours / 40 field hours) Prerequisite: ENL010 and ENL050 or satisfactory basic skills assessment score / 3 credits. Offered: Fall

Engineering
Intro to Engineering and Advanced Manufacturing
ENR101. Students are introduced to the world of engineering and manufacturing through activities that showcase how products are designed and built. Teams design, build, and test a weight-bearing structure, as well as reverse engineer a product to improve its design. Classroom and laboratory exercises are designed to expose the student to the different engineering and advanced manufacturing disciplines. Lab sessions provide hands-on exposure to the concepts discussed in the lecture sessions. This course does not require any prior engineering background. Prerequisite: ENL020 and ENL050 or satisfactory basic skills assessment scores / 4 credits. Satisfies a General Education elective. Offered: Fall

3D Mechanical Design I
ENR102. This is an introductory course for students interested in exploring careers as engineers, architects, and designers. Principles associated with 3D design, visualization, documentation, and product simulation are taught through hands-on use of Computer Aided Design (CAD) modeling software. In addition, student designed parts are fabricated in a 3D printer to enhance the understanding of the design to manufacturing process. (3 class hours / 2 laboratory hours) Prerequisite: MAT030, ENL020, and ENL050 or satisfactory basic skills assessment scores / 4 credits. Satisfies a General Education requirement. Offered: Fall, Spring

Introduction to Robotics
ENR103. Students work in teams to design, build, program, and test increasingly complex electro-mechanical robots. The course teaches how robots move (locomotion and kinematics), how they sense (perception), and how they reason about their environment (planning). Lecture information is tied to lab experiments and sessions. Students are exposed to robotics related career options in the manufacturing, service, and medical industries. This course does not require any prior engineering background. (3 class hours / 2 laboratory hours) Prerequisite: MAT030, ENL020, and ENL050 or satisfactory basic skills assessment scores / 4 credits. Satisfies a General Education requirement. Offered: Fall, Spring

English
Also see Developmental Education, English for Speakers of Other Languages, Journalism, and Literature.
Course descriptions for the following courses are listed under Developmental Education.
ENL010. PREP for College Reading
ENL020. College Reading and Study Skills
ENL040. Essential Writing Skills
ENL045. Sentence Strategies
ENL050. Foundations in Writing
ENL080. Developing Vocabulary
ENL082. Study Skills
ENL083. Basic Grammar Review

Course descriptions for the following courses are listed under English for Speakers of Other Languages (ESOL).
ESL010. English for Speakers of Other Languages I: Basic
ESL102. English for Speakers of Other Languages II: Intermediate
ESL201. English for Speakers of Other Languages III: Advanced

English Composition I
ENL101. ENL101 is an introductory college composition course required of all AA and AS degree students and prerequisite to all other college-level English courses. It is designed to help students develop and express ideas clearly and effectively using Standard American English through frequent writing and the study of rhetorical patterns of development. Students learn to write MLA style document essays. Prerequisite: Appropriate scores in Reading Comprehension and in Sentence Skills on Computerized Placement Test or grade of C or better in ENL020 and ENL050 or ESL201 / 3 credits. Satisfies the English Composition/Writing general education requirement. Offered: Fall, Spring, Summer
English Composition II
ENL102. A continuation of ENL101, this course is required of all Associate in Arts students and a prerequisite to all 200-level English courses. This course focuses on reading, analyzing, and writing about literature and is designed to help students refine writing skills developed in ENL101. Prerequisite: A grade of C or higher in ENL101 / 3 credits. Satisfies either an English Composition/Writing or Humanities & Fine Arts general education requirement. Offered: Fall, Spring, Summer

Critical Reading and Thinking
ENL108. This course guides students to enhance their comprehension of written, spoken, and visual information by improving their critical thinking abilities. Through practicing habits of mind to strengthen analytical and reasoning skills, students learn to form well-supported arguments, draw thoughtful conclusions, make responsible decisions, and transfer acquired skills to their academic, professional, and personal life. Prerequisite: ENL020 or satisfactory basic skills assessment score / 3 credits. Satisfies a Humanities & Fine Arts general education requirement. Offered: Fall, Spring

Technical Writing
ENL131. This course is designed for students who have acquired basic writing skills and who seek further experience in the collection, organization, and communication of information from their specific career fields. Prerequisite: ENL101 / 3 credits. Offered: Varies

Journalism I
ENL161. This course is designed to instruct the student in the collecting, writing, editing, and publishing of news and feature articles in periodicals. Although weekly lecture and discussion periods will be mandatory, the emphasis in the course will be on writing news stories outside of regular class time. Each student in the course is expected to be involved in the student newspaper. Word processing is used. Prerequisite: ENL101 / 3 credits. Satisfies a Humanities & Fine Arts general education requirement. Offered: Fall, Spring

Journalism II
ENL163. This course, a continuation of ENL161, puts the emphasis on an analysis of the elements of journalism and the writing of feature stories, interviews, human interest stories, and various other kinds of reporting. Students in this course learn to proofread, edit, and layout final copy for the MainSheet or other mass media. Prerequisite: ENL161 / 3 credits. Offered: Fall, Spring

Creative Writing
ENL209. An advanced workshop for students seriously interested in writing for publication. Techniques in short fiction and non-fiction, marketing non-fiction, and the building of a creative imagination are systematically explored. Prerequisite: ENL102 / 3 credits; may be repeated once for credit. Offered: Fall, Spring

Poetry Writing
ENL213. This poetry writing workshop class provides serious students the opportunity to write poetry of their own and explore poetry through reading others’ work. Students write, read, peer edit/critique, present and listen to poetry. Prerequisite: ENL102 / 3 credits. Offered: Spring

Advanced Research Report Writing
ENL216. This course focuses on methods for organizing information, for analytically structuring complex issues, and the logic for making persuasive arguments. Students select topics of interest to them — ranging from studies they have wanted to pursue to projects in their academic specialization. The instructional approach is highly individualized. Seminars center around issues of global significance. The tangible goal is to produce a portfolio piece. Prerequisite: ENL102 / 3 credits. Offered: Varies

Selected Topics in Writing
ENL291. Selected Topics in Writing provides students the opportunity to explore and practice extensive writing within a writing specialty. Topics may include, among others, writing about photography, writing feature stories, writing commentary and opinion, writing about sports, writing poetry, or writing for children. The course is writing intensive. Specific content depends on the specialty chosen. Prerequisite: ENL102 / 3 credits; may be repeated once for credit. Offered: Varies

Peer Tutorial Practicum (Language and Literature)
ETU100. This is a training course for peer tutors. Through readings, journal responses, discussions, and practical experience, the course introduces students to the theories used in writing center work as well as the practical application of those theories. Tutors peer-critique, self-monitor, and tutor. The main objective is for students to become effective peer tutors and better writers. Prerequisite: Faculty recommendation and B+ or higher in a composition course / 1, 2, or 3 credits; may be repeated for credit; 3 credits maximum. Offered: Varies

Reading Tutorial Practicum
ETU101. In this two-semester course, students participate in a comprehensive training experience designed to thoroughly familiarize them with the tutoring process by means of videotape viewing, readings, discussion, and supervised practicum in the local elementary schools. (One credit (15 hrs): 6 classroom hours, 9 tutoring hours. Two credits (30 hrs): 6 classroom hours, 24 tutoring hours. Three credits (45 hrs): 6 classroom hours, 39 tutoring hours. Once a student has completed the six classroom hours of instruction in one semester, subsequent enrollment in the Reading Tutorial Practicum consists of 15, 30, or 45 supervised tutorial hours with no further formal classroom hours necessary. (Students may receive work-study money if they qualify.) Prerequisite: Faculty recommendation and CORI/SORI clearance (refer to page 6) / 1, 2, or 3 credits; may be repeated for credit; 3 credits maximum. This is a two-semester course; credits are earned at the completion of the second semester. Offered: Fall-Spring

English for Speakers of Other Languages/English for Academic Purposes (ESOL/EAP)

English for Speakers of Other Languages I: Basic
ESL010. This course introduces the literate non-native speaker of English to the four skills — reading, writing, speaking and understanding spoken English — to develop a basic command of Standard American English. Prerequisite: None / 4 non-degree credits. Offered: Fall, Spring

Academic Speaking and Listening for English Learners
ESL100. This course is designed to help students who are learning English develop their listening and speaking skills for interactions in academic settings in an English-speaking college environment. Prerequisite: a CPT ESL listening test score of or greater than 40 or ESL010 or permission of instructor / 1 credit. Offered: Summer

English for Speakers of Other Languages II: Intermediate
ESL102. This course is a continuation of ESL010 and provides the intermediate level non-native English speaker with instruction in reading, writing, speaking, and understanding spoken English. Emphasis is placed on developing the ability to read and discuss standard college English works; ability to recognize and produce correct patterns in sentences and paragraphs; and the ability to combine paragraphs into correct and coherent compositions. Prerequisite: ESL010 or satisfactory basic skills assessment score / 3 credits. Offered: Fall, Spring
English for Speakers of Other Languages III: Advanced ESL201. This course is a continuation of ESL102 (ESL II) and provides the advanced level non-native English speaker with instruction in reading, writing, and speaking, and understanding standard American English. Emphasis is placed on developing the ability to read and write essays from college-level English works; ability to produce short essays and coherent compositions; and the ability to discuss materials written at the college level. Prerequisite: ESL102 or satisfactory basic skills assessment score / 3 credits. Offered: Fall, Spring

Environmental Technology

Survey of Environmental Technology ENV101. A history of Environmental Technology is presented with emphasis on the current applications of the best available technology. The diverse environmental career opportunities are presented through field trips and guest speakers. Prerequisite: None / 3 credits. Offered: Fall, Spring

Quantitative Methods for Environmental Analysis ENV105. Designed for environmental technology students. Emphasis is on mathematical skills essential in scientific applications. Mathematical and statistical skills using a scientific calculator and computer are used to assess current environmental data sets. Conclusions are drawn based on these data assessments. Prerequisite: (MAT030 or MAT035) or satisfactory basic skills assessment score / 3 credits. Offered: Fall

Environmental Chemistry ENV115. Discussion and study of the relationship between chemistry and contemporary environmental topics, including energy and the environment, air, soil, oil, solid and water pollution, and agricultural chemistry. Prerequisite: CHM106 / 3 credits. Offered: Fall

Introduction to Environmental Science ENV118. A study of environmental interactions including population and cultural problems, resource utilization, and impacts upon biotic systems. Presented to enable students to better understand and evaluate contemporary environmental problems and the application of science to their solution. The corresponding laboratory component provides students with the practical experience of measuring, recording and interpreting environmental data. Interdisciplinary knowledge is used to solve environmental problems. Some field trips may be required, (3 class hours / 2 laboratory hours) Prerequisite: (MAT020 or MAT025), ENL020 and ENL050 or satisfactory basic skills assessment scores / 4 credits. Satisfies a Natural or Physical Science general education requirement. Offered: Spring, Summer

The Process of Environmental Management and Decision-Making ENV122. This course is an introduction to the process of environmental management and decision-making. It incorporates a modular approach to instructing students on issues of environmental protection throughout Cape Cod by focusing on wetlands, habitat, land-use planning, and conservation. Students explore watershed management and remediation, focusing on wastewater, water supply and storm water issues. Students also learn about environmental health and safety, focusing on prevention, compliance and environmental mediation, and zoning issues. Prerequisite: None / 3 credits. Offered: Fall, Spring

Coastal Ecology ENV125. This is an introduction to coastal marine habitats, their species, and their ecological relationships. Students develop an understanding of the diversity of living things along the Cape Cod shoreline. Students also examine the wide diversity of habitats and their differences on the Cape. This course includes extensive lab and field work. Prerequisite: None / 3 credits. Offered: Fall, Spring, Summer

Coastal and Shelf Oceanography ENV126. This course provides an overview to the oceanography of coastal and shelf systems. Throughout the course, the interdisciplinary aspects of oceanography are emphasized by covering many areas of study including biology, chemistry, geology, physics, history, and ecology. Students gain a basic understanding and appreciation of the effects of natural marine processes as well as consequences of human activity. Emphasis is on near-shore, shallow-water systems. Prerequisite: (MAT020 or MAT025) or satisfactory basic skills assessment score, ENV118, and ENV125 / 3 credits. Offered: Spring

Projects in Coastal Ecology ENV127. This is an advanced class focusing on field studies of coastal marine habitats and their species composition. Students are involved in extensive field and lab surveys of several sites on Cape Cod. They examine both the biological and physical features of the coastal marine environment. Students work in small teams collecting physical (slope, particle size) and chemical data (pH, salinity, nitrates), plant and animal surveys, and recording data to analyze in the classroom. Prerequisite: ENV118 and ENV125 / 3 credits. Offered: Fall

Coastal Zone Management Laws and Regulations ENV135. This introductory course covers the issues and regulations related to the coastal environment and its resources. The course uses an interdisciplinary approach that combines the scientific issues with their economic and social impact. Topics covered include nitrogen loading, fisheries management, aquaculture, wastewater impact, marine sanctuaries, public access, renewable energy projects, coastal flooding and erosion, and sustainable development. Current research is examined and several guest speakers will present. Prerequisite: ENV118 and ENV125 / 3 credits. Offered: Spring

Introduction to Water: Concepts and Technologies ENV140. A study of the physical and chemical properties, human uses, hydrology and ecology of groundwater, marine, estuarine, standing and flowing water systems, focusing on the science of current water-related issues and the methods and technologies used in their solution. The basic concepts of water quality monitoring, water supply, and wastewater technologies are emphasized. Some field trips may be required. Prerequisite: None / 3 credits. Offered: Fall

Industrial Wastewater Treatment ENV142. This course provides an overview of the basic concepts of physical and chemical treatment, the function of related equipment and support systems and the environmental responsibilities required to safely and properly operate, maintain and manage an industrial wastewater treatment facility. This course covers typical industrial wastewater treatment processes; their purpose, their function, and their safe and efficient operation and prepares students to take a Massachusetts Industrial Wastewater Certification Exam (levels 1-4). Prerequisite: ENV118 and ENV140 / 3 credits. Offered: Varies - at Massachusetts Maritime Academy.
Wastewater Treatment Plant Operation
ENV145. The course covers the specific processes, problem-solving and operations in municipal wastewater treatment plants. Students are taught the operating parameters, data collection and analysis; the decision-making and process control of complex biological systems; and maintenance fundamentals required of Grade 4 Certification level operators. Prerequisite: ENV118 and ENV140 / 4 credits. Offered: Varies - at Massachusetts Maritime Academy.

Water Supply
ENV146. This course is a study of the principles and practice of water supply. This course provides an introduction to the physical and chemical principles of drinking water supply, the functioning of related equipment and support systems, and the responsibilities required to safely operate and maintain a water supply system. May be taken for 4 CEUs by current employees in the Waterworks industry. Prerequisite: ENV118 and ENV140 / 3 credits. Offered: Spring

Air Pollution Issues
ENV152. This course introduces the concepts and terms essential to understanding the issues behind the need for air pollution control. Basic atmospheric processes is presented as they affect delivery and dispersion of pollutants. The health effects of various pollutants and air toxins are presented in order to understand the purpose of regulations. The increasing concerns regarding indoor air quality are presented along with approaches to investigation and control. Prerequisite: ENV118 and CHM106 / 3 credits. Offered: Spring

Occupational Health and Safety (OSHA) through Hazardous Waste Management
ENV158. This course covers issues involved in the determination, treatment and reduction of hazardous wastes and the federal regulations regarding handling of hazardous wastes, the risks to society from hazardous wastes, and treatment techniques employed to mitigate their effects. The techniques covered include thermal, physio-chemical, biological and landfill disposal as well as the ways and means of reducing the generation of hazardous wastes. 40-hour (OSHA) HAZWOPER certification is awarded upon successful completion of this course. Prerequisite: None / 3 credits. Offered: Spring

Environmental Information Systems (GIS) I
ENV163. This is a two-part course that focuses on the designing and building of a map using a relational database. The course focuses on the principles of database management as related to cartography and GIS. The students are provided with the fundamental topics for each subject in class. Prerequisite: ENV118 / 3 credits. Offered: Fall, Spring

Environmental Information Systems (GIS) II
ENV164. The fourth and final course in the GIS certificate is designed to build on the concepts developed in ENV163. The course proceeds through the concepts of GIS in the lecture. Students choose a project and apply the concepts to the project as the course proceeds. Projects are chosen from many topics in GIS analysis: coastal zone management, hazardous materials management, environmental planning, urban planning and site assessment. Prerequisite: ENV118, ENV160 and ENV163 / 3 credits. Offered: Spring

Renewable Energy Sources
ENV170. This course provides an overview of renewable energies including solar energy, wind power, hydropower, biomass, hydrogen and fuel cells. Students learn the basic principles of each technology for new and existing construction. They study government regulations, analyze renewable energy systems, calculate savings, backup energy, and financing options. They investigate the potentials of renewable energy technologies to help solve environmental and economic problems with society. Prerequisite: (MAT020 or MAT025), ENL020, and ENL050 or satisfactory basic skills assessment scores / 3 credits. Offered: Fall, Spring, Summer

Energy Efficiency and Conservation Methods
ENV171. This course provides students with the information to identify and explain all of the energy efficiency/conservation methods available for energy use reduction. Energy-consuming facilities, both domestic and commercial, are analyzed by the students for energy efficiency opportunities. The students calculate energy savings and environmental impacts for most energy efficiency methods in order to identify and assess energy conservation opportunities. In addition, the students demonstrate the appropriate usage of energy monitoring and measuring equipment commonly used by energy specialists and energy auditors. Prerequisite: (MAT020 or MAT025), ENL020 and ENL050 or satisfactory basic skills assessment scores / 3 credits. Offered: Fall

Commercial Energy Audits
ENV172. This course offers an interactive approach for students to understand, compile, and conduct an energy audit for commercial facilities. It has been customized for the Cape Cod region and emphasizes regional issues. Prerequisite: ENV171 / 3 credits. Offered: Spring

Introduction to Solar Energy
ENV173. Students in this course gain an understanding of our solar energy resource and how it can be utilized for a variety of energy demand applications in residential, commercial, and municipal buildings. The benefits and limitations of various solar energy technologies that are commonly used to produce heat, hot water, and electricity are examined. Students learn how to properly site, size, design, and specify solar hot water and solar electric systems. Students also learn how to perform an economic and environmental analysis of proposed systems. Prerequisite: (MAT020 or MAT025), ENL020 and ENL050 or satisfactory basic skills assessment score / 3 credits. Offered: Spring

Introduction to Wind Energy
ENV177. This course provides an in-depth introduction to wind power as a sustainable form of energy. It examines the history, current applications, and future of wind power. Students gain a basic understanding of the fundamental science behind harnessing usable energy from the wind. A study of the process for siting, developing, constructing, operating, and maintaining wind energy projects of different scales - from home and small commercial to municipal and utility scale. Prerequisite: (MAT020 or MAT025), ENL020 and ENL050 or satisfactory basic skills assessment scores / 3 credits. Offered: Spring

Photovoltaic Installation
ENV178. This course introduces students to the fundamentals of photovoltaic (PV) system installation and maintenance procedures. The class is divided between classroom based lectures/activities and project based activities involving the installation of a residential scale PV system. Students who complete this course are eligible to take the North American Board of Certified Energy Practitioners’ Entry Level Certificate of Knowledge of PV Systems Examination (for an additional fee). Prerequisite: ENV173 / 3 credits. Offered: Varies
Solar Thermal Installation
ENV179. This course introduces students to the fundamentals of solar thermal system installation and maintenance procedures. The class is divided between classroom-based lectures/activities and project-based activities that involve the installation of a residential scale solar thermal system. This course is approved by the North American Board of Certified Energy Practitioners and counts towards the training requirements for becoming a certified Solar Thermal System Installer (additional field experience is required to be eligible for certification). Prerequisite: ENV173 / 3 credits. Offered: Varies

Small Wind Installation
ENV180. This course introduces students to the fundamentals of small wind-electric system installation and maintenance procedures. The class is divided between classroom-based lectures/activities and project-based activities that involve the installation of a residential-scale wind system. This course is based in part on the Task Analysis for the North American Board of Certified Energy Practitioners Small Wind Energy Systems Installer Certification. Prerequisite: ENV177 / 3 credits. Offered: Varies

Introduction to Green Building
ENV181. This course provides a framework for making practical design and construction decisions that are environmentally responsible by focusing on residential design for Cape Cod, including new construction and renovations/additions. Topics include site orientation, building science fundamentals, passive solar design, water and energy efficiency, healthy indoor environments, green materials and resources, and certification programs in the industry. Students learn to prioritize numerous types of green building strategies by examining case studies and field experiences. Prerequisite: (MAT020 or MAT025), ENL020, and ENL050 or satisfactory basic skills assessment scores / 3 credits. Offered: Varies

Environmental Technology Internship/Cooperative Experience
ENV260. This course involves a range of hours monitored field experience that is consistent with the student's career goals. Students keep journals and write prescribed "analysis" papers as they progress during the course of the semester. Time commitment is based on the number of credits, 70 hours per credit. Prerequisite: ENV118 or ENV170 and permission of instructor / 1, 2, 3, or 4 credits. Offered: Fall, Spring, Summer

Film
Introduction to Film
COM120. (formerly COM220) This course provides the student with an appreciation of the film experience. Particular attention is given to important techniques, theories, and genres which influenced the technical and aesthetic development of the medium. Concepts are illustrated through the viewing of classic American and international cinema. (4 class hours) Prerequisite: ENL101 / 3 credits. Satisfies a Humanities & Fine Arts general education requirement. Offered: Fall

The American Film
COM221. (formerly COM121) This course provides the student with an appreciation of the film experience through a survey of American film from historical, aesthetic, economic, technological, critical, and appreciative viewpoints. Particular attention is given to important techniques, theories, and genres. Concepts are illustrated through viewing classic American cinema. (4 class hours) Prerequisite: ENL101 / 3 credits. Satisfies a Humanities & Fine Arts general education requirement. Offered: Fall, Spring

International Cinema
COM222. This course is a survey of the development of international cinema from historical, aesthetic, economic, technological, critical, and appreciative viewpoints. Particular attention is given to important techniques, theories, and genres. (4 class hours) Prerequisite: ENL101 / 3 credits. Satisfies a Humanities & Fine Arts general education requirement. Offered: Spring

Documentary Film
COM224. Filmmaker John Grierson defined documentaries as "the creative treatment of reality." This course looks at the history and development of the documentary film, with a particular focus on the varying notions of truth, art, reality. Students in this class learn how to look at documentaries with a critical eye by not only studying the subject, but also by participating directly in the making of an actual documentary video. Prerequisite: ENL101 / 3 credits. Offered: Spring

Fire Science
Fire Fighting Tactics and Strategy
FSC103. This course is concerned with basic fire fighting tactics and strategy; methods of attack; preplanning of fire problems including necessary equipment and manpower. Some fire problems are presented for analysis and study, consistent with accepted practices from authoritative sources. The concepts of I.C.S. and R.I.C. are discussed throughout the class. Prerequisite: FSC150 or FSC100 / 3 credits. Offered: Varies

Hazardous Materials
FSC105. This course reviews the fundamental physical and chemical principles which govern the behavior of hazardous materials. Specifically, the course deals with identifying hazardous materials and the hazards of solids, dusts, water reactive materials, liquids, gases, toxic materials, plastics, corrosives, oxidizing agents, explosives, radioactivity, LP gases, cryogenics, general hazards and electricity. Handling, transporting, storage and recommended fire fighting practices within extreme fire hazard areas are discussed. Laboratory demonstrations illustrate and supplement the class work. Prerequisite: CHM106 or (CHM101 or CHM151) or CHM109 / 3 credits. Offered: Varies

Hydraulics for the Fire Service
FSC107. This course is concerned with the fundamentals of hydraulics and fluid mechanics as they relate to the firefighter and individuals involved in Fire Protection. Subjects to be studied include: principles of fluid statics, fluid motion, water supply testing, fire pump operation and fire suppression systems. Prerequisite: FSC150 or FSC100 and (MAT030 or MAT035) or satisfactory basic skills assessment score / 3 credits. Offered: Varies
Fire Investigation and Evidence
FSC108. This course covers the methods used in determining the causes and circumstances of fire. The collecting and preserving of evidence are covered; as well as the preparation of evidence for court. Prerequisite: FSC150 or FSC100 / 3 credits. Offered: Varies

Fire Department Management and Planning
FSC109. An exploration of organization principles with emphasis on fire department organization; a study of history, types, methods, and principles of fire department organization; insurance and fire defense, personnel and equipment, water supply, departmental functions, and administrative problems. Prerequisite: FSC114 / 3 credits. Offered: Varies

Fire Codes and Ordinances
FSC110. This course reviews the codes which influence the field of fire prevention including the fire prevention regulations of the Commonwealth of Massachusetts (527 CMR). Also included are Chapters 48, 143 and 148 of the General Laws of the Commonwealth, as well as the Massachusetts Building Code, and the codes of the National Fire Protection Association. Prerequisite: None / 3 credits. Offered: Varies

Fire Company Management
FSC114. A study of scope and functions of the fire company officer in the fire department. Topics discussed include: the role of the fire service, departmental procedures, administrative and management procedures, training, public relations, tactics and strategy, and fire prevention. Prerequisite: FSC150 or FSC100 / 3 credits. Offered: Varies

Introduction to Technical Rescue
FSC115. The student receives instruction in the basic concepts of technical rescue. An explanation of related equipment, regulations and procedures to supervise and conduct technical rescue operations are explained. Prerequisite: None / 3 credits. Offered: Varies

Introduction to Incident Management
FSC120. This course introduces the philosophy of emergency scene management, the National Incident Management System (N.I.M.S.), planning and preparation in anticipation of a likely emergency, and management of specific types of emergency situations including a review of lessons learned from historical incidents. This course is intended to acquaint students with the basic management tools needed to operate as a command officer at the scene of an emergency or disaster. Prerequisite: ENL020 and ENL050 or satisfactory basic skills assessment score / 3 credits. Offered: Varies

Shipboard Firefighting
FSC130. This course is designed to give the students an understanding of the maritime industry by providing information on maritime terminology, ship construction, firefighting shipboard fire protection systems, and shipboard firefighting. The course focuses on the necessary tactics and strategies needed to deal with a maritime fire as well as the various agencies that can provide assistance in dealing with a shipboard fire. Students are given a tour of a ship, during which time the systems are explained and the shipboard firefighting problems discussed. Prerequisite: None / 3 credits. Offered: Varies

Principles of Emergency Services
FSC150. (replaces FSC100) This course provides an overview of fire protection and emergency services; career opportunities in fire protection related fields; culture and history of emergency services; fire loss analysis; organization and function of public and private fire protection services; fire departments as part of local government; laws and regulations affecting the fire service; fire service nomenclature; specific fire protection functions; basic fire chemistry and physics; introduction to fire protection systems, fire strategy, and tactics; and life safety initiatives. Prerequisite: ENL020 and ENL050 or satisfactory basic skills assessment scores / 3 credits. Offered: Varies

Fire Prevention
FSC151. (replaces FSC101) This course provides fundamental knowledge relating to the field of fire prevention. Topics include history and philosophy of fire prevention, organizations and operation of a fire prevention bureau, use and application of codes and standards, plan review, fire inspections, fire and life safety education, and fire investigation. Co-requisite: FSC150 or FSC100 / 3 credits. Offered: Varies

Fire Protection Systems
FSC152. (replaces FSC102) This course provides information relating to the features of design and operation of fire alarm systems, water based fire suppression systems, special hazard fire suppression systems, water supply for fire protection and portable fire extinguishers. Co-requisite: FSC150 or FSC 100 / 3 credits. Offered: Varies

Building Construction for the Fire Protection
FSC153. (replaces FSC104) This course provides the components of building construction related to fire fighters and life safety. The elements of construction design of structures are shown to be key factors when inspecting buildings, preplanning fire operations, and operating at emergencies. Co-requisite: FSC150 or FSC100 / 3 credits. Offered: Varies

Principles of Fire and Emergency Services Safety and Survival
FSC154. This course introduces the basic principles and history related to the national firefighter life safety initiatives focusing on the need for cultural and behavioral change throughout the emergency services. Prerequisite: FSC150 or FSC100 / 3 credits. Offered: Varies

Fire Behavior and Combustion
FSC155. This course explores the theories and fundamentals of how and why fires start, spread, and are controlled. Co-requisite: FSC150 or FSC100 / 3 credits. Offered: Varies

Special Topics in Fire Science
FSC200. This course serves to deepen student’s knowledge of subjects in Fire Science introductory courses and explore timely issues outside the established curriculum. Prerequisite: Any introductory-level Fire Science course / 1 credit; may be repeated for a maximum of 3 credits. Offered: Varies

Fitness
Also see Health Sciences and Nursing.

Decision Making in Health
FIT105. The course examines information, concepts and knowledge for influencing changes in health-related behavior so that the student may make decisions that will affect him/her personally throughout the life cycle. The course includes in-depth study and discussions in the areas of health as it affects people physiologically, psychologically, and sociologically. It assists the students in evaluating their beliefs, attitudes, and values toward their own personal health in a rapidly changing environment. Prerequisite: None / 3 credits. Offered: Varies

Fitness and Sports Nutrition
FIT115. This course provides information about the relationship between nutrition and fitness/sports performance. It is of interest to professionals who advise athletes and to the general population interested in improving health and physical performance through sound nutritional practices. Topic examples include carbohydrate metabolism, weight management, body composition assessment, eating disorders, ergogenic aids, and pre/post- and competition meals. Prerequisite: None / 3 credits. Offered: Varies
Personal Fitness
FIT117. Students assess their current level of health-related fitness and develop a physiologically sound program of physical activity to meet their needs and interests. The course emphasizes the concept of physical fitness as a lifetime commitment and stresses the acquisition of specific knowledge, skill, and motivation necessary to meet this commitment. Prerequisite: None / 3 credits. Offered: Fall, Spring

Lifeguard Training (LGT)
FIT133. The course affords students the opportunity to develop the knowledge and skills associated with safety, supervision and rescue in an aquatic environment. Emphasis is placed on the development of skills designed to save the life of another in an aquatic emergency. Those successfully completing the course will be certified by the American Red Cross in Lifeguard Training (R94) (including First Aid certification), CPR for the Professional Rescuer and Waterfront Lifeguarding. LGT Certification indicates the minimum skills training for a person to qualify as a non-surf lifeguard. Students must be able to pass a swimming proficiency test- completed at 2nd class meeting. Prerequisite: None / 3 credits. Offered: Fall, Spring

Survey of Lifetime Activities
FIT142. The course surveys the fundamental skills, specific knowledge, and relative values of selected leisure sports. The course focuses on the examination of personal skills, interests, and needs as criteria for the selection of and participation in leisure sports and the constructive use of leisure time. Class format includes an introduction to participation in selected leisure sports, discussion of class activities and related leisure concepts, and small group and individual assignments. Prerequisite: None / 3 credits. Offered: Varies.

Pilates Mat I
FIT164. Pilates Mat I is designed to expose the student to the Pilates methods of body conditioning with a unique system of stretching and strengthening exercises developed over 90 years ago by Joseph Pilates. Pilates strengthens and tones muscle, increases flexibility, and develops better posture. The student learns the basic beginning sequence of exercises and gains an understanding of muscle groups as they relate to Pilates. Prerequisite: None / 1 credit. Offered: Fall, Spring

Kripalu/Hatha Yoga I
FIT167. A five-week course designed to expose the student to basic yoga philosophy, breathing exercises, simple postures and relaxation techniques. The student also learns about the major muscles and bones, as well as the circulatory and nervous system of the human body in relation to yoga. Prerequisite: None / 1 credit. Offered: Fall, Spring

Kripalu/Hatha Yoga II
FIT168. A five-week course designed for the student who has completed FIT167. New postures are introduced, and postures are held for longer periods of time. Additional breathing techniques are incorporated. Students develop a deeper understanding of how the body functions, and how yoga affects these functions. Relaxation techniques are further developed. Prerequisite: FIT167 / 1 credit. Offered: Fall, Spring

Adventure Concepts
FIT170. This course explores the use of the adventure paradigm (model) as a means of promoting effective intrapersonal and interpersonal behavior. Using an interdisciplinary approach, the course examines the relationship of risk, goal setting, and skill development/application to personal and social growth. Adventure activities such as rappelling, group problem solving tasks, and individual initiative projects are used to provide a common experiential base for the discussion of course concepts. Prerequisite: None / 3 credits. Offered: Fall, Spring

French
Also see International Studies.

Conversational French
FRN100. This conversational French course is designed to introduce the non-native speaker of French to the four basic skills necessary to developing a working knowledge of French: understanding, speaking, reading, and writing. The emphasis is on speaking and understanding spoken French. Prerequisite: ENL050 or satisfactory basic skills assessment score / 3 credits. Offered: Varies

Elementary French I
FRN101. This is the first semester of a two-semester college elementary French sequence. It is for beginning students of French. The text and ancillary materials provide a thorough four skills approach: speaking, reading, writing, and understanding spoken French. This course is not intended for students whose native language is French. Prerequisite: ENL020 and ENL050 or satisfactory basic skills assessment score / 4 credits. Satisfies a Humanities & Fine Arts general education requirement. Offered: Fall

Elementary French II
FRN102. This is the second semester of a two-semester college elementary French sequence. It is for beginning students of French. The text and ancillary materials provide a thorough four skills approach: speaking, reading, writing, and understanding spoken French. The purpose of this course is to provide students a sound basis for learning French as it is spoken and written today. (5 class hours) Prerequisite: FRN101 or permission of the instructor / 4 credits. Satisfies a Humanities & Fine Arts general education requirement. Offered: Spring

Immersion Study in French Language/Civilization
FRN122. Students study French language and civilization in a Francophone country. Traditional class work is supplemented by cultural activities and field trips. Prerequisite: None / 3 credits. Offered: Spring

Intermediate French I
FRN201. This course is for students who have completed one year of Elementary French or two years of high school French. Students read, discuss, and write about francophone culture and language in French. Prerequisite: FRN102 or 2-4 years of high school French / 4 credits. Satisfies a Humanities & Fine Arts general education requirement. Offered: Fall

Intermediate French II
FRN202. Intermediate French II is for students who have completed Intermediate French I or three to four years of high school French. Students read, discuss and write about francophone culture and language in French. (5 class hours) Prerequisite: FRN201 or 3-4 years of high school French / 4 credits. Satisfies a Humanities & Fine Arts general education requirement. Offered: Spring
Advanced French: Survey of French Literature I  
FRN301. This course is a survey of selected French literary works. These selections serve as a basis for classroom discussion and writing assignments. Conversation and composition polish and develop students' abilities in all four language skills: reading, writing, listening, and speaking. Prerequisite: FRN202 / 3 credits. Offered: Fall

Advanced French: Survey of French Literature II  
FRN302. This course is a survey of selected contemporary French literary works. These selections serve as a basis for classroom discussion and writing assignments. Conversation and composition polish and develop students' abilities in all four language skills: reading, writing, listening, and speaking. Prerequisite: FRN202 / 3 credits. Offered: Spring

Freshman Seminar  
First Year Seminar  
FSM101. This course increases students' success in college by assisting them in obtaining skills and the knowledge of resources necessary to reach their educational goals. Prerequisite: None, Letter grade or Pass-Fail / 1 credit. Offered: Fall, Spring

Geography  
American Geography  
GEO101. Comprehensive, systematic study of population, natural resources, and potentialities of the United States and Canada. Evaluates these nations against a background of world economics and political affairs. Prerequisite: None; ENLO20 and ENLO50 or satisfactory basic skills assessment scores recommended / 3 credits. Offered: Varies

Geography: Culture and Environment  
GEO104. This course examines the differences and spatial interactions of various cultures, technologies, and regions. The economic and social possibilities of local, extra-local, and regional environments are viewed from the perspective of their resident human populations. The concept of a world region is introduced and used as framework by which to understand the contemporary issues associated with cultural geography. The basic concepts of cultural geography are introduced and the analytical tools of cultural geography are reviewed. The successful student is conversant with the basic tools and concepts of cultural geography, the analytical perspectives of the discipline, as well as the broad cultural patterns of the cultural regions of the world. Prerequisite: None; ENLO20 and ENLO50 or satisfactory basic skills assessment scores recommended / 3 credits. Satisfies a Behavioral & Social Sciences general education requirement. Offered: Spring

German  
Conversational German  
GER100. This basic conversational German course is designed to introduce the non-native speaker of German to the four basic skills necessary to develop a working knowledge of German: understanding, speaking, reading, and writing. The emphasis is on speaking and understanding spoken German. Prerequisite: ENLO50 or satisfactory basic skills assessment score / 3 credits. Offered: Fall, Spring, Summer

Elementary German I  
GER101. The first semester of a two-semester college elementary German sequence for beginning students of German. The text and ancillary materials provide a thorough four-skills approach: speaking, reading, writing, and understanding spoken German. This course is not intended for students whose native language is German. Prerequisite: ENLO20 and ENLO50 or satisfactory basic skills assessment score / 4 credits. Satisfies a Humanities & Fine Arts general education requirement. Offered: Fall

Elementary German II  
GER102. This is the second semester of a two-semester college German sequence. It is for beginning students of German. The text and ancillary materials provide a thorough four-skills approach: speaking, reading, writing, and understanding spoken German. Prerequisite: GER101 / 4 credits. Satisfies a Humanities & Fine Arts general education requirement. Offered: Spring

Austria: Vienna & Salzburg  
GER126. This one-week study tour emphasizes the history, art, and culture of Austria in the early 1900s. Students come to understand the political and artistic dynamics of a world caught between the traditions and power of an old empire and the beginnings of the industrial era, which brought forth a new generation of artists who celebrated life in the Jugendstil form of art and architecture. Students must participate in all study tour activities. Prerequisite: None / 3 credits. Offered: Varies

Intermediate German I  
GER201. This course is for students who have completed one year of elementary college German or two to four years of high school German. Students read, discuss, and write about German culture and language in German. Prerequisite: GER102 or 2-4 years of high school German / 4 credits. Satisfies a Humanities & Fine Arts general education requirement. Offered: Fall

Intermediate German II  
GER202. This course is for students who have completed Intermediate German I or three to four years of high school German. Students read, discuss, and write about Germanic culture and language in German. Students must have college-level reading and writing skills in their native language. Students are expected to be able to greet and respond to greeting and introductions, engage in conversation, express likes, dislikes and needs, describe and compare, narrate a short anecdote using past, present, and future tenses, write simple paragraphs, and read and understand some details and important ideas in authentic texts. Prerequisite: GER201 / 4 credits. Satisfies a Humanities & Fine Arts general education requirement. Offered: Spring

Health Sciences  
Also see Fitness and Nursing.

Advanced Concepts for Nursing Assistants  
CNA122. (formerly HEA112) This course is designed to teach advanced skills to nursing assistants and home health aides working with more acutely ill patients in Medicare (sub-acute) units in nursing homes, in home care, and in hospitals. Prerequisite: CNA117 or permission of instructor / 1 credit. Offered: Varies

Pediatrics and Parenting  
CNA128. (formerly HEA128) This course is designed to prepare nursing assistants/home health aides to care for children in community settings. Topics include health promotion, parenting, hospice care, and care of the sick and disabled child and adolescent. A holistic approach to families is used to assist in meeting the physical, psychological, emotional, and spiritual needs of children and their careproviders. Prerequisite: CNA117 or permission of instructor / 3 credits. Offered: Varies

EKG Technician  
DTC102. This 30-hour course prepares the student to function as an EKG technician and assist with Holter monitoring and stress testing. Upon successful completion of this course, the student is eligible to take the national certification exam for EKG technicians. Prerequisite: None / 2 credits. Offered: Fall, Spring
Fundamentals of Phlebotomy
DTC104. This course is a combination of lecture and lab which presents the theory, application and procedures of phlebotomy skills. The student obtains knowledge of specific anatomy, safety, quality control, Point of Care Testing, and processing of specimens. Applicants must attend an information session and advising session prior to admission. Prerequisite: None / 6 credits. Offered: Fall, Spring

Phlebotomy Practicum
DTC204. A course combined with completion of DTC104 prepares the student to function as a phlebotomist and meets the eligibility criteria of the American Society of Clinical Pathologists (ASCP) for certification. This course is a combination of 120 hours of internship with 3 hours scheduled on-campus seminars. Prerequisite: DTC104 with passing grade of 75% or better, successful demonstration of skill proficiency and recommendation of faculty / 2 credits. Offered: Fall, Spring

Emergency Medical Technician: EMT
EMS101. This course is designed to train participants to work with existing agencies that provide emergency medical services. Included in these services are first-aid procedures, operation of emergency equipment, and knowledge of communications systems associated with emergency and rescue operations. Students gain knowledge and skills relating to medical and emergency technology within classroom and laboratory settings. The students are eligible for state certification upon successful completion of course and state examination. Prerequisite: None / 5 credits. Offered: Fall, Spring

Advanced Pre-Hospital Training Program: Paramedic I
EMS201. This course covers the roles and responsibilities of the EMT/Paramedic including history and physical assessment, pathophysiology and management of shock, cardiac, respiratory, neurological, and abdominal emergencies, and overview of emergency medical services communication systems. Students perform skills under the supervision of a clinical preceptor in a variety of clinical sites, including critical care units, operating rooms, emergency departments, and renal dialysis departments. Applicants must be currently certified as an EMT. Applicants are required to attend an information session. Special tuition is charged. Prerequisite: ENL020 and (MAT020 or MAT025) or satisfactory basic skills assessment scores / 7 credits. Offered: Fall

Advanced Pre-Hospital Training Program: Paramedic II / Paramedic Clinical Field Experience
EMS202/602. Assessment and management of emergencies and obstetrics, gynecology, trauma, pediatrics, adolescent medicine, and geriatrics. Students perform skills under the supervision of a clinical preceptor in a variety of clinical sites, including critical care units, operating rooms, emergency departments, pediatric intensive care units, labor and delivery rooms, and psychiatric units. Students respond to emergency medical service calls and perform paramedic skills as part of an advanced life support ambulance crew under the supervision of a field preceptor. Special tuition is charged. Prerequisite: EMS201 / 8 credits. Offered: Spring

Stress Management for Optimal Health
HEA120. A comprehensive approach to the subject of stress and its effects on health and disease. Stress concepts are addressed within a holistic framework appreciating the physiological, psychological, emotional, social, and spiritual aspects of individuals. Common physical, intrapersonal, interpersonal, environmental, and global stressors are assessed. Current stress interventions are introduced. Emphasis is on integrating knowledge from several disciplines to provide an informed scientific foundation for stress management. Prerequisite: None; PSY101 recommended / 3 credits. Offered: Fall, Spring

Standard First Aid and Basic Life Support (Cardiopulmonary Resuscitation)
HEA130. (formerly FIT130) The course provides participants with a basic knowledge of First Aid skills for treatment of illness or injury, as well as instruction in Basic Life Support for the healthcare provider (CPR) according to the guidelines of the American Heart Association (AHA). Upon successful completion of the course, students receive AHA certification in both Standard First Aid and CPR. Prerequisite: None / 1 credit. Offered: Fall, Spring

Advanced First Aid & Emergency Care/Basic Life Support/First Responder
HEA132. (formerly FIT132) The course provides comprehensive and advanced coverage of first aid skills for treatment of illness or injury, as well as Basic Life Support/Healthcare Provider (BLS/HCP) for the professional rescuer. Upon successful completion of the course, the participants receive certification as a First Responder in accordance with Massachusetts General Law chapter 111: Section 201 and Basic Life Support for the Healthcare Provider in accordance with the standards established by the Committee on Cardiopulmonary Resuscitation and Emergency Cardiac Care of the American Heart Association. Prerequisite: None / 3 credits. Offered: Fall, Spring

Pharmacology
HEA200. This course addresses the interaction between substances used as drugs and human body systems. Knowledge of natural sciences, pharmacokinetics, and pharmacodynamics between chemical entities and receptors, and pharmacological concepts of administration, dosage and patient safety are stressed. Emphasis is placed upon mechanisms of action, side effects, and drug interactions. Prerequisite: Acceptance into the Nursing program; Co-requisites: NUR107 and (BIO108 or BIO285) or permission of the instructor / 3 credits. Offered: Fall, Spring, Summer

Nutrition
HEA201. Principles of nutrition are discussed in detail and related to many different settings. Topics of discussion include: My Pyramid; nutritional labeling; the (6) nutrients and how each is ingested, digested, metabolized, and transported throughout the human body; nutritional counseling of many different types of patients, such as the cancer patient, geriatric patient, infant, child and adolescent; and food safety. An introductory course for individuals interested in pursuing a Dietetics major. Prerequisite: CHM109 and (BIO107 or BIO251) / 3 credits. Offered: Fall, Spring, Summer

Fundamentals of Medical Assisting
MAC101. This introductory course for the Medical Assisting certificate is designed to bring together a learning community of students to explore the role of the professional medical assistant, the health care team, the history of the profession, and credentialing requirements. They learn to obtain patient histories, vital signs, principles of infection control, etc. Prior to admission to this course the student must attend an information session and an advising session. Prerequisite: BIT103 and BIO105 / 3 credits. Offered: Fall
Medical Assisting Clinical Procedures and Clinical Practicum
MAC204. This seven-credit course is designed to teach basic medical assisting clinical skills and provide practical experience in a clinical setting to complement the clinical and office skills required by the credentialing agency (Commission for Accreditation of Allied Health Education Programs-CAAHEP). The course is divided into lecture, laboratory practice, clinical practicum, and seminar. Prerequisite: a grade of C or higher in MAC101; co-requisite: BIT203 / 7 credits. Offered: Spring

History

U.S. History to 1865
HIS103. This introductory survey of United States history from the European invasion of North America through the mid-19th Century period of the Civil War and Reconstruction addresses major social, cultural, political, and economic developments with emphasis on their relation to contemporary United States institutions and trends. Prerequisite: None; ENL020 and ENL050 strongly recommended / 3 credits. Satisfies a Behavioral & Social Sciences general education requirement. Offered: Fall, Spring, Summer

U.S. History since 1865
HIS104. This introductory survey of United States history from Reconstruction to the present addresses major social, clutural, political, and economic developments with emphasis on their relation to contemporary United States institutions and trends. Prerequisite: None; ENL020 and ENL050 strongly recommended / 3 credits. Satisfies a Behavioral & Social Sciences general education requirement. Offered: Fall, Spring, Summer

The U.S. since 1945
HIS108. This course is a contemporary history of the United States (since World War II) at home and abroad. It provides an in-depth investigation of the events, developments, personalities, and meanings of the changes of the past years. Prerequisite: None; ENL020 and ENL050 or satisfactory basic skills assessment scores strongly recommended / 3 credits. Satisfies a Behavioral & Social Sciences general education requirement. Offered: Fall, Spring

World History I
HIS119. This survey course explores the economic, political, cultural, and social developments in world history from the rise of civilization to 1500 Current Era (CE) in Asia, Africa, Europe, Oceania, the Middle East, and the Americas. The course highlights issues of geography, trade, religious and cultural movements, and social and political change that influenced the historical evolution of various world societies and their interrelationships within a global context. Prerequisite: None; ENL020 and ENL050 are strongly recommended / 3 credits. Satisfies a Behavioral & Social Sciences general education requirement. Offered: Fall, Spring, Summer

World History II
HIS120. This survey course explores the economic, political, cultural, and social developments in world history from 1500 Current Era (CE) to the present in Asia, Africa, Europe, Oceania, the Middle East, and the Americas. The course highlights issues of geography, trade, religious and cultural movements, and social and political change that influenced the historical evolution of various world societies and their interrelationships within a global context. Prerequisite: None; ENL020 and ENL050 are strongly recommended / 3 credits. Satisfies a Behavioral & Social Sciences general education requirement. Offered: Fall, Spring

History of China
HIS141. The course is a survey of Chinese history and culture beginning with the first Chinese Dynasty through the Communist Revolution in the 20th Century. Students examine the historical, political, economic, and social factors that eventually developed modern China. Upon completion of the course, students have a better understanding of how the Chinese view the world, especially the United States and the American people. Prerequisite: None; ENL 020 and ENL 050 strongly recommended / 3 credits. Satisfies a Behavioral & Social Sciences general education requirement. Offered: Varies

European History I
HIS160. (formerly HIS157) This course provides a general overview of major topics of European History from ancient times up to 1600 Current Era (CE). Students focus on cultural, religious, political, and economic developments that formed the basis of modern European culture and society and influenced the Americas and other regions. Prerequisite: ENL020 and ENL050 or satisfactory basic skills assessment score / 3 credits. Satisfies a Behavioral & Social Sciences general education requirement. Offered: Fall, Spring, Summer

European History II
HIS162. (formerly HIS158) This course provides a general overview of European History from 1600 to the present. Students focus on cultural, religious, political, and economic developments that formed the basis of modern European culture and influenced the United States and other nations. Prerequisite: ENL020 and ENL050 or satisfactory basic skills assessment score / 3 credits. Satisfies a Behavioral & Social Sciences general education requirement. Offered: Spring

Ancient History
HIS206. This survey course examines the development of the earliest civilizations of the Near East and Europe, including Mesopotamia, Egypt, Greece and Rome, including their major historical periods; cultural contributions; and social, political, and economic organization. Prerequisite: ENL101 / 3 credits. Satisfies a Behavioral & Social Sciences general education requirement. Offered: Fall, Summer

Medieval History
HIS207. Students survey the elements of medieval history from the fall of the Roman Empire in the West to the coming of the Renaissance. This course emphasizes the development of the medieval church, the growth of feudalism and the origins of its decline, and the seminal ideas which continue to affect our civilization. Prerequisite: ENL101 / 3 credits. Satisfies a Behavioral & Social Sciences general education requirement. Offered: Spring

Women in United States History
HIS215. This course is a survey of the roles and status of women in American society from colonial times to the present. The contributions of women to the development of the United States are examined with particular emphasis upon multiculturalism, legal status, economic opportunities, reproduction and family life. Prerequisite: ENL101 / 3 credits. Satisfies a Behavioral & Social Sciences general education requirement. Offered: Spring

History of Japan
HIS216. This course is a survey of the history of Japan from ancient times up to the present. The class explores the different periods and transformations of Japanese society and culture, focusing on art, literature, religion, government, relations with China, Korea and the West, World War II and Japanese imperialism, the post-war economic boom, and the current global popularity of Japanese pop culture. Prerequisite: ENL101 / 3 credits. Satisfies a Behavioral & Social Sciences general education requirement. Offered: Fall, Spring, Summer
The Civil War
HIS217. This course addresses a crucial era in United States history: the Civil War. The class covers three major areas of historical inquiry: a) the events that led up to the war including sectionalism and slavery; b) the war itself including an overview of military events, the political and economic impact of war, and the social history of war; and c) Reconstruction, the process by which the nation sought to rebuild after the war. Prerequisite: ENL101 / 3 credits. Satisfies a Behavioral & Social Sciences general education requirement. Offered: Fall, Summer

History of the Middle East
HIS227. This course explores the development and interactions of cultures in the region now referred to as the “Middle East” – Southwest Asia – and adjacent regions that today share many aspects of culture. The course covers the early civilizations of Mesopotamia, travel through the rise (and fall) of empires that spread through the region (such as the Persian, Islamic, Mongol, Ottoman and Safavid empires), explore the period of direct and indirect Western (European and American) intervention, the rise of fundamentalism and the Arab Spring. Prerequisite: ENL101 and a 100-level history course / 3 credits. Satisfies a Behavioral & Social Sciences general education requirement. Offered: Spring

Women in European History
HIS228. This course explores women’s real and perceived roles and status in society from Ancient Greece to modern times. The course focuses on women’s roles in the development of European history. Students explore how history has impacted the lives of women of different social and cultural groups, and how women have impacted history. Prerequisite: ENL101 / 3 credits. Satisfies a Behavioral & Social Sciences general education requirement. Offered: Fall

Selected Topics in History
HIS241. This course serves as a vehicle to either deepen students’ knowledge of subjects addressed in History introductory courses or explore issues outside the traditional curriculum. Prerequisite: Any introductory-level History course / 3 credits; may be repeated once for credit. Satisfies a Behavioral & Social Sciences general education requirement. Offered: Varies

Vietnam: America’s Longest War
HIS253. This course is a historical study of the U.S. involvement in the Vietnam War. Students gain a basic understanding of America’s involvement in the Vietnam War, its impact on those who served, as well as the impact on current U.S. thinking. Guest speakers who participated in the war provide personal insight. Prerequisite: ENL101 / 3 credits. Satisfies a Behavioral & Social Sciences general education requirement. Offered: Fall, Spring, Summer

African-American History
HIS258. This survey course addresses African Americans in United States history, thought, and culture from slavery to the present. Topics addressed include slavery and emancipation, civil rights, religion, arts and literature, and gender. Prerequisite: HIS103 or HIS104 / 3 credits. Satisfies a Behavioral & Social Sciences general education requirement. Offered: Varies

Homeland Security

Introduction to Homeland Security
HSC101. This course is a comparative examination of the relationship of the criminal justice system to business and industrial security, with a focus on the role private security plays in Homeland Security. The course closely examines the role of private security in protecting people and assets. Prerequisite: ENL050 or satisfactory basic skills assessment score / 3 credits. Offered: Fall

Maritime Security
HSC102. This course provides an examination of regulations, vulnerabilities, and threats relating to commercial maritime transportation, including cargo and seaport security, as well as issues of privacy, stowaways, terrorism, and international disputes. Prerequisite: ENL050 or satisfactory basic skills assessment; Co-requisite: HSC101 / 3 credits. Offered: Fall

Management of Incidents
HSC103. This course is a basic incident management course that could apply aspects of local and state governments, but concentrates on the law enforcement aspect. The course examines overall management techniques, coordination of rescue efforts, National Incident Management System (NIMS) and the Unified Command System. Prerequisite: HSC101 / 3 credits. Offered: Spring

Cybercrime
HSC104. This course provides students with basic information on how commonly encountered high-technology crimes are committed as well as basic investigation strategies including the collection of evidence and computer forensics focusing on the network. Crimes dealing with computers, telephones, check-reading machines, credit card machines, and other technology are discussed. Issues dealing with jurisdiction and legislation to expressly criminalize cybercrime are discussed. Prerequisite: HSC101 or BIT187 / 3 credits. Offered: Spring

Horticulture

Plant and Soil Science
HOR101. This course provides an in-depth introduction to plant classification, anatomy, physiology, nutrition and reproduction. Chemical and physical properties of soil, as well as the relationship between soils and plant growth, are emphasized. (3 class hours / 2 laboratory hours) Prerequisite: (MAT020 or MAT025), ENL020, ENL050, or satisfactory basic skills assessment scores / 4 credits. Satisfies a Natural or Physical Science general education requirement. Offered: Fall, Spring

Entomology and Plant Diseases
HOR102. A survey of the common insect pests and pathogens of ornamental plants, including a review of the basic principles of entomology and plant pathology. Topics include biological diversity, taxonomy, morphology, physiology, ecology, behavior, insect/human relationships, pesticides, biological control, and the causes, nature and control of plant pathogens. A ‘least is best’ philosophy is emphasized, regarding use of pesticides in controlling the various competitions for plant health. Integrated plant management is the basis for control strategy. Prerequisite: None / 3 credits. Offered: Fall

Woody Plant Identification and Culture
HOR103. The identification and culture of native and ornamental plants and shrubs are discussed. Plant requirements, characteristics and placement, as well as susceptibility to diseases and pests are reviewed. Methods of pruning, fertilizing and special needs are discussed. Prerequisite: None / 3 credits. Offered: Fall

Turf Management
HOR104. An introduction to the establishment and maintenance of turf grass. Turfgrass and weed identification, cultural practices and maintenance will be included. Insect and disease life cycles and control will be reviewed. Integrated pest management (IPM) is emphasized. Prerequisite: None / 3 credits. Offered: Fall
Equipment Maintenance and Operation
HOR105. Introduction and training in the repair, maintenance and safe operation of golf course and landscaping equipment. Maintenance and troubleshooting procedures of small and large gasoline and diesel engines and basic welding are emphasized. Students learn the techniques of mowing a golf green and are instructed in the operation of a front-end loader tractor. Methods and maintenance of irrigation systems are also included. Prerequisite: None / 3 credits. Offered: Varies

Horticulture Practicum
HOR106. Work in an area of horticulture in a business, government or non-profit organization for at least 150 hours to receive practical training in the horticulture field. Students have an opportunity to develop and pursue challenging work experiences which relate directly to their individual career plan. A minimum of 150 hours in horticulture-related employment and a bi-weekly meeting with the Horticulture Program Coordinator. Prerequisite: Enrollment in an Horticulture certificate program. Pass-Fail / 1 credit. Offered: Fall, Spring, Summer

Floral Design
HOR107. This course is an introduction to the identification, care, handling and designing of floral crops. It makes the student aware of the various business challenges of a retail florist operation and makes them capable of successfully dealing with those challenges. Emphasis is placed on preparing the student with the skills to work as a floral designer. Prerequisite: None / 3 credits. Offered: Varies

Herbaceous Plant Identification and Culture
HOR201. The identification and culture of herbaceous annuals, perennials, groundcovers and vines are discussed. Students review propagation, placement and pest vulnerability of herbaceous plants commonly used in the landscape. Prerequisite: HOR101 / 3 credits. Offered: Spring

Landscape Design and Construction
HOR202. Introduction to landscape design including site analysis, estimation of costs of installation, selection of site furnishings, and construction of walks, steps and walls. Prerequisite: HOR103 / 3 credits. Offered: Spring

Hospitality Management

Fundamentals of Professional Cooking
CUL150. (formerly HRM150) This course is an introduction to the management of food preparations, sanitation, and costing. Principles of cookery and their relation to methods of preparations, nutrition, cost control, kitchen organization, and management are emphasized. Co-requisite: HRM111 / 4 credits. Offered: Fall, Spring

Baking I
CUL180. An introduction to the principles of professional baking including: the chemistry of baking, terminology, scaling and measuring, and equipment use. Preparation includes a variety of breads and pastries with emphasis on proper production methods, baking methods, and final product presentation and display. Students are responsible for required supplies and materials. (1 class hour / 4 laboratory hours) Prerequisite: None / 3 credits. Offered: Fall, Spring

Dining Room Operations and Service
CUL210. This course provides an introduction and practical application into the operation of a dining room with emphasis on quality guest service. Topics include: “front of the house” organization, methods of table service, menu terminology, table arrangement, requirements for supplies and equipment, suggestive selling techniques, and revenue control and analysis. Personnel issues including hiring, training, writing personal resumes, and strengthening interview skills. Students serve meals prepared in a restaurant setting during the course of the semester. Culinary Arts Certificate students should take CUL210 concurrently with CUL220. (2 class hours / 4 laboratory hours). Prerequisite: CUL150 or HRM140; Corequisite: CUL220 / 4 credits. Offered: Spring

Advanced Culinary Arts
CUL220. A continuation of CUL 150, this capstone course builds upon basic skills and introduces more advanced culinary skills, ethnic, regional and international cuisine and stresses communication in an operating food production environment. Additionally, students are required to develop and execute menus developed in class, and include purchasing and menu specifications, proper ordering, receiving and storage of foods, and analysis of business activity from a monetary perspective. Limited to Culinary Arts Certificate students. (2 class hours / 4 laboratory hours). Prerequisite: HRM140 or HRM150/CUL150 / 4 credits. Offered: Fall, Spring

Foodservice Sanitation
HRM111. This course provides the future hospitality manager with certification in Applied Foodservice Sanitation from the National Institute for the foodservice industry. A state-mandated certificate is awarded at the successful completion of the National Foodservice exam. Prerequisite: None / 1 credit. Offered: Fall

Food and Beverage Management
HRM130. This course covers the essentials of food and beverage controls. An awareness of management objectives is developed through the examination of organizational structures of food service. Students study topics such as menu pricing, break-even analysis, and cost-volume-profit theory. Emphasis is placed on forecasting and achieving profitability. Prerequisite: (MAT020 or MAT025) or satisfactory basic skills assessment score / 3 credits. Offered: Spring

Introduction to Hospitality Management
HRM140. Students are introduced to the operation of businesses in the hospitality field. Emphasis is on the development cycle of the industry, current trends, and analysis of management responsibilities. Prerequisite: ENL020 or satisfactory basic skills assessment score / 3 credits. Offered: Fall

Casino Management
HRM170. This course introduces the student to the history of the gaming industry and the basics of casino management. The course emphasizes ethics in the gaming industry, the economics of the industry, and its interface with hotel and restaurant organizations. An overview of the industry, gaming control law, and career opportunities are highlighted. Prerequisite: ENL020 or satisfactory basic skills assessment score / 3 credits. Offered: Fall

Lodging Operations
HRM215. This course focuses on front desk operations and management's relationship to the front office. Methods of revenue management are applied to areas of price structure, occupancy patterns and income. Legal contract and liability issues specific to the lodging industry are also covered. Prerequisite: HRM140 / 3 credits. Offered: Fall

Hospitality Marketing
HRM230. Marketing of hospitality industry is studied through the exercise of strategic marketing planning. Understanding of the marketing concept and how it is applied to the mission statement, research techniques, situation analysis, positioning, and the tools of marketing. Prerequisite: HRM140 and ENL101 / 3 credits. Offered: Spring
Special Events and Operations Management
HRM250. As the capstone course for Hotel Restaurant Management students, the focal point of this course is the planning, organizing and execution of special events that include: a theme, specialized menu, entertainment, dining room decorations, and uniforms reflected in the actualities of the hospitality industry. Beyond food purchasing, production and services, students are responsible for revenue control and analysis. Group work, as a class and in individual specialized groups, emphasizes completing assigned tasks. Students serve meals prepared in a restaurant setting during the course of the semester. (2 class hours / 2 laboratory hours) Limited to HRM students. Prerequisite: CUL150 or HRM140 / 3 credits. Offered: Spring

Hospiilty Cooperative Work Experience
HRM262. The core content of this course involves 300 hours of monitored field experience which is consistent with the student's career goals. Students keep journals and write proscribed 'analysis' papers as they progress during the course of the semester. Prerequisite: 9 credits in CUL/HRM curriculum / 3 credits. Offered: Fall, Spring, Summer

Humanities

Humanities: Perception Through the Arts
HUM102. This course is an introduction to humanistic studies; it examines works of the human spirit (in music, painting, philosophy, sculpture, architecture, drama, poetry) which have influenced our civilization and who we are as individuals. Prerequisite: ENL101 / 3 credits. Satisfies a Humanities & Fine Arts general education requirement. Offered: Fall, Spring, Summer

Human Services

Introduction to Human Services
HUS101. This course is an introduction to the historical, political and social aspects of Human Services. Topics include themes and purposes of Human Services, theoretical orientations, history and evolution of the Human Services profession, skills and intervention strategies for generalist practice, the helping process, working within a system, child and family services, mental health, substance abuse and treatment. Also covered are professional concerns including ethical standards, decision making, confidentiality, and clients' rights. Prerequisite: None / 3 credits. Satisfies a Behavioral & Social Sciences general education requirement. Offered: Fall, Spring

Introduction to Alcohol and Substance Abuse
HUS104. This course explores the causes and consequences of addiction as it relates to all aspects of society. This course briefly discusses the impact on the healthcare system, family system, and legal system. Historical implications and response to changes over time are reviewed. Topics regarding intervention, treatment, education, and prevention are discussed. Competencies and requirements for licensure in Massachusetts are explained. Addiction issues related to diverse populations are presented. Prerequisite: ENL020 and ENL050 or satisfactory basic skills assessment scores / 3 credits. Offered: Fall, Spring

Human Services Practicum
HUS202. This course establishes learning opportunities in the field of human services. Based on National Community Support Skill Standards, students are required to spend 100 clinical hours in a human services agency. In addition, students participate in a weekly class to process clinical experiences; expand skills, including sensitivity, empathy, confrontation, and problem-solving. The course also addresses goal setting, case management, and client assessment. CORI/SORI required. Prerequisite: By permission of Human Services Coordinator. PSY101, HUS101 and PSY208 / 3 credits. Offered: Fall, Spring, Summer

Advanced Human Services Practicum
HUS203. Students are required to spend 100 clinical hours in the role of a human service provider and participate in the 12 National Community Support Skills Standards in a human services setting throughout the semester. In addition, students participate in a weekly class to process clinical experiences with clients, services provided, and agency interaction. The advanced experience and course address innovative clinical situations in individual and group settings. CORI/SORI required. Prerequisite: By permission of Human Services Coordinator. ENL101, HUS202, and PSY209; Co-requisite: HUS230 and HUS231 / 3 credits. Offered: Fall, Spring, Summer

Addictions Practicum
HUS204. The class establishes learning opportunities in the field of addictions. Students spend 50 hours throughout the semester in a human services addictions agency. In addition, students participate in a weekly class to process clinical experiences where they reflect on their field experiences, expand skills, including sensitivity, empathy, diversity awareness, confrontation, and problem-solving. Class also addresses goal setting, case management, and client assessment. The class requires 50 hours in a clinical setting. CORI/SORI required. Prerequisite: COM103, PSY101, HUS101, and HUS104; Co-requisite: HEA120 / 3 credits. Offered: Varies

Advanced Addictions Practicum
HUS205. This course establishes learning opportunities in the field of addictions. Students spend 100 hours throughout the semester in a human services addictions agency to apply the knowledge, values, concepts, and skills of the addiction profession. Students participate in a weekly class to process clinical experiences and focus on skill building in treatment planning, counseling, client engagement strategies, client education, consultation with other professionals and documentation. The class requires 100 hours in a clinical setting. CORI/SORI required. Prerequisite: ENL101, HUS230, HUS204, PSY208, and PSY209; Co-requisite: HUS231 / 3 credits. Offered: Varies

Introduction to Social Welfare
HUS229. (formerly SOC229) This course includes an analysis of the conceptions of social work, social welfare and social service delivery systems from both historical and contemporary perspectives. Includes critical examination of the values, the social justice mandate as well as issues of cultural diversity that effect and inform the practice of social work. Social work is presented as a profession that integrates science, clinical awareness, and human understanding in practice intervention, policy development, and research. Contemporary issues and problems in various fields of social work practice are explored with particular emphasis on the role of the generalist social work practitioner. Prerequisite: PSY101 or SOC106 / 3 credits. Offered: Varies
Mental Health, Substance Abuse, and Families
HUS230. (formerly HUS102) This course reviews assessment, intervention, and treatment in dual diagnosis families, from a systems model. Topics include needs, concerns, and resistance in individual members, and the family as a whole. Discussions revolve around the dynamics of codependency; a comparison of approaches to family recovery; treatment techniques appropriate to the different phases of family recovery; and strategies to help prevent family relapse. Service learning may be used for experiential learning. Prerequisite: (PSY101 or SOC106) and HUS101, HUS229 / 3 credits. Offered: Fall, Spring.

Treatment Modalities in Human Services
HUS231. (formerly HUS106) This course introduces the most commonly used and widely accepted treatment and relapse prevention methods in the mental health and alcohol/substance abuse field. The course explores the role of the social service worker and treatment modalities utilized in the school, prison, outpatient, inpatient, and day treatment areas as they apply to the different special populations. The populations discussed include children, adults, elderly, dual diagnosis, incarcerated, and those with addictions. Service Learning may be used for experiential learning. Prerequisite: PSY101, HUS101, HUS229 / 3 credits. Offered: Fall, Spring.

Information Technology - General

Database Applications
GIT150. Students acquire an in-depth, hands-on understanding of a PC-based relational database. Using Microsoft Access®, students create and edit tables, forms, and reports; sort, query and graph data; and attach, import and export data to/from other applications. Data normalization techniques are studied. Students, working individually and in teams, design and implement database applications. This course prepares students for the Microsoft Office User Specialist Access exam. Prerequisite: GIT108 or equivalent skill level in Windows / 3 credits. Offered: Fall, Spring.

Database Design and Development
BIT250. Students study and apply the functions of a database management system (DBMS), file systems, the relational model, query by example (QBE), introductory structured query language (SQL), entity relationships, normalization techniques, database design, and multi-user and network considerations. In addition, database administration, advanced database design, disaster recovery, and current trends in database technology are reviewed. Students develop advanced database applications using a Windows-based application such as Microsoft Access®. Prerequisite: GIT150 / 3 credits. Offered: Fall.

Advanced Topics in Database with SQL
BIT253. Using Structured Query Language (SQL) students learn advanced features and programming tools for the implementation of databases in a client/server environment. Students complete hands-on projects using advanced Relational Database Management System, Visual Basic, and Microsoft Access®. Prerequisite: BIT250 and BIT175 / 3 credits. Offered: Spring.

Information Technology Foundations
BIT112. This survey course introduces students to all aspects of the Information Technology (IT) industry and is intended for students wishing to make informed choices for careers in IT. Students receive an overview and understanding of the core aspects of Information Technology including Network and Infrastructure Systems, Information Support and Services, Interactive Media and Programming and Software Development. The focus of this course is an understanding and appreciation of the duties of information technology professionals and how each IT area relates to and interacts with the others. Upon completion of this course, students have the knowledge necessary to make educated choices about continued study in IT as well as understanding the impact of technology on society and organizations of all types. Prerequisite: ENL020 and ENL050 or satisfactory basic skills assessment scores / 3 credits. Offered: Varies.

Microcomputer Hardware
BIT113. Students learn the anatomy of a microcomputer by disassembling, assembling, upgrading and customizing a PC. Students evaluate purchasing vs. building a PC. The role of the BIOS and CMOS in the POST and BOOT processes is explored. System boards, processors, memory, and peripherals, including input, output, multimedia, network and data devices are studied. Students learn troubleshooting, safety, basic operating systems procedures, and security and preventive maintenance techniques. Customer service is stressed. This course covers the hardware material for the Comp TIA A+ Essentials certification exam. Prerequisite: ENL020 and ENL050 or satisfactory basic skills assessment scores / 3 credits. Offered: Fall, Spring.

Operating Systems
BIT115. Students develop competency installing, configuring, upgrading, and supporting Windows operating systems. Students learn through comparison, the differences and similarities between various operating systems. Students study operating system structure, file systems, directory commands, file attributes, GUI and command line interfaces, operating system utilities, and security. Communication, team building, and professionalism are stressed. This course covers the operating system material for CompTIA A+ certification exams. Prerequisite: GIT110 / 3 credits. Offered: Fall, Spring.

Introduction to the Internet
GIT180. This course is designed to provide the student with both a theoretical and practical overview of the Internet. Students are prepared to perform confidently in business, educational, and personal areas of interest using many Internet services including: Telnet, File Transfer Protocol (FTP), Newsgroups, and the World Wide Web (WWW). Prerequisite: ENL020 and ENL050 or satisfactory basic skills assessment score / 3 credits. Offered: Varies.
Information Technology Field Project
BIT260. Students have a practical, hands-on experience developing a real-world computer application. This course must be taken in conjunction with an advanced-level IT course. (1 hour per week of consultation with the assigned faculty member; a minimum of 15 hours of independent work). Prerequisite: Permission of IT Coordinator / 1 credit; may be repeated once. Offered: Varies

Information Technology Cooperative Work Experience
BIT261. The student works in an information systems office for 150 hours to gain practical training in one of the varied aspects of information technology. All students in Information Technology tracks are encouraged to take a cooperative work experience. Limited to students enrolled in the Information Technology program. Prerequisite: Completion of at least 2 semesters of Business & IT courses and/or comparable practical work experience. Permission of IT Coordinator / 3 credits; may be repeated once for credit. Offered: Fall, Spring, Summer

Information Technology - Networking
Networking Essentials
BIT187. Using a hands-on approach, students learn principles and practices of designing, installing, maintaining, upgrading, and troubleshooting peer-to-peer and client-server networks. Students study network operating systems theory, topologies, and protocols including planning, designing, and managing networks. Students reinforce their knowledge through interactive activities, labs and simulators. This is the first of two courses needed to prepare for the Cisco Certified Entry Networking Technician (CCENT) industry exam. Prerequisite: BIT115 / 3 credits. Offered: Fall, Spring

Wireless Networking
BIT236. Using a hands-on approach, students learn the fundamentals of planning, installing, maintaining, and troubleshooting a network supported by unbounded media. Assuming no prior knowledge of wireless networks and devices, students are prepared to apply and support wireless technology in personal, LAN, and WAN networks. Many of the skills required for the Certified Wireless Network Administration (CWNA) exam are covered while exploring all current IEEE wireless protocols. Prerequisite: BIT187 / 3 credits. Offered: Fall

Windows Server Administration
BIT237. Using a hands-on approach, students learn current Windows Server architecture, installation, configuration, upgrading, proactive maintenance, security and environmental issues, troubleshooting and problem determination, and disaster recovery. Concepts covered include the differences between versions of Windows, installation, protocols, devices and drivers, disk and data storage, user and computer accounts, domain user and group accounts, group policy, and file system access and security. This course begins preparing students for MCSA/ MCSE Certification Exams. Prerequisite: BIT187. NOTE: Open for credit to students who have completed BIT223; not open for credit to students who have completed BIT223 and BIT234 / 3 credits. Offered: Fall

Advanced Networking Essentials with Cisco
BIT239. This course covers the structure of the Internet for communications, operations of routers, and network device implementation for basic WAN connectivity. Students use simulation to analyze, configure, verify and troubleshoot networking protocols and services. Students successfully completing this course are prepared for the Cisco Certified Entry Networking Technician (CCENT) industry exam. Prerequisite: BIT187 / 3 credits. Offered: Spring

Information Technology - Office Technology
Typing I
GIT101. Students learn to master the computer keyboard, develop speed and accuracy, and prepare basic business documents. Prerequisite: None / 3 credits. Offered: Fall, Spring

Computer Keyboarding
GIT102. Learn to touch-type correctly on a microcomputer. Attention is given to developing accuracy and, as time permits, increasing speed. Hands-on preparation of a letter and a research paper are included. Prerequisite: None; Pass-Fail. 1 credit. Offered: Fall, Spring

Spreadsheet Applications for Business
GIT110. Students gain a conceptual and practical understanding of electronic worksheets utilizing the spreadsheet, data management, graphics, and application development components of a Windows-based spreadsheet program. Students complete a variety of exercises designed to develop mastery of the major components of the spreadsheet program as it is used in the business office environment. This course covers the material for the Microsoft Office User Specialist Excel Expert Exam. Prerequisite: GIT110 and ACC111 or ACC201 / 3 credits. Offered: Fall, Spring

Advanced Word Processing Applications
GIT220. Students learn proficiency using many of the advanced functions and special features of a comprehensive word processing package. Course content includes: tabs, print styles and sizes; macros; data manipulation; basic mathematical computations; special text features like outline, columns, and merges; and graphic elements. GIT110 and GIT220 cover all the material for the Microsoft Office Specialist Word Expert Certification exam. Prerequisite: GIT110 / 3 credits. Offered: Spring

Office Communications Systems
GIT105. This course is designed to expose the student to the variety of information/communication modes available to individuals employed in today's office environment. The following major areas are addressed: communication theory, electronic communications in the automated office, oral presentation, ethical practices, and written business documentation. The importance of accurate communications and the development of language art skills are emphasized. Business communications and formats, including business reports, letters, and memos are studied. Prerequisite: ENL020 and ENL050 or satisfactory basic skills assessment scores / 3 credits. Offered: Fall, Spring

Windows Operating System
GIT108. This course provides an introduction to the Windows operating system and the hardware of a typical microcomputer system. Skills needed to navigate the Windows desktop, manage disks and files, and use Windows applications are explored. The WordPad and Paint programs are utilized as office tools. Students become proficient users of pointing devices. Prerequisite: ENL020 and ENL050 or satisfactory basic skills assessment score / 1 credit. Offered: Fall, Spring
Medical Terminology
BIT103. Medical terminology is the study of the principles of medical word building to help the student develop the extensive medical vocabulary used in health care occupations. Students receive a thorough grounding in basic medical terminology through a study of root words, prefixes, and suffixes. The study focuses on correct pronunciation, spelling, and use of medical terms. Anatomy, physiology, and pathology of disease are discussed yet no previous knowledge of these topics is necessary. Prerequisite: ENL020 and ENL050 or satisfactory basic skills assessment score / 3 credits. Satisfies a General Education elective. Offered: Fall, Spring, Summer

Information Technology - Software Development
Visual Basic Programming
BIT175. Students learn the design processes and development tools available in Visual Basic using the .NET Framework. This knowledge is applied to build and execute Windows-based applications. Screen design, process controls and software interfacing are covered in addition to Visual Basic syntax. Prerequisite: (MAT030 or MAT035) or satisfactory basic skills assessment score and GIT110 / 3 credits. Satisfies a General Education elective. Offered: Fall, Spring

Medical Office Procedures
BIT202. Students develop the concepts and skills needed to function effectively in an administrative assistant position. The course includes the following: human relations; customer service; communication services; meetings, minutes, and agendas; travel arrangements and itineraries; financial statements and reports; professionalism; machine transcription; and resumes and interview techniques. Prerequisite: GIT110 / 3 credits. Offered: Spring

Medical Coding and Billing
BIT207. This course is designed to teach the student the current medical coding practices used for third-party billing. ICD-9-CM and CPT and HCPCS II coding are covered along with an in-depth study of insurance companies, Medicare, insurance claim forms, accounts receivable, and legal issues relating to medical record keeping. Prerequisite: BIT103 / 3 credits. Offered: Fall, Spring

Advanced Role Playing Game Development
BIT265. Building on the concepts introduced in Foundations of Game Development, this course provides in-depth coverage of role-playing game (RPG) development: storyline, programming, music, and graphics. Game programs are developed using C++ and the DirectX IDE. Prerequisite: GIT160 and (CSC110 or CSC120 or GIT175) Offered: Spring

Application Development for Mobile Devices
BIT266. This course offers a practical introduction to the mobile device app development industry. Students learn about the operating systems of mobile devices, limitations and challenges of developing mobile applications and create and submit an app to the app marketplace. Prerequisite: ENL020 and ENL050 or satisfactory basic skills assessment scores and (CSC110 or CSC120 or BIT175) / 3 credits. Offered: Spring

Information Technology - Web Design
Web Site Design and Scripting
GIT183. Learn the basics of web site design including text formatting, graphics, animations, color, layout, linking. This project-based course requires the student to develop a well-designed web site using HTML, DHTML, and Javascript. Prerequisite: GIT110 / 3 credits. Offered: Fall, Spring

JavaScript and jQuery Web Scripting
BIT284. Building on HTML, DHTML, and CSS skills, students learn to use JavaScript and jQuery to create dynamic web sites. XML, AJAX, JSON, and Blogger and API's for YouTube, Twitter, and Flickr are introduced. Prerequisite: GIT183 / 3 credits. Offered: Varies

Medical Office Procedures
BIT203. Students prepare for immediate and long-term success as administrative assistants and medical assistants in a medical office environment. The course includes the following: an overview of the healthcare industry, client/patient relations and communication, health information management, medical practice management, and professional workplace behavior. Students acquire skills in a medical office software package and explore ethical/legal issues in modern medicine. Prerequisite: GIT110 and BIT103 / 3 credits. Offered: Spring

Medical Coding and Billing
BIT208. Students continue their mastery of diagnostic and procedural coding and billing through complex case studies and use of authentic medical records. Students are introduced to International Classification of Diseases ICD-10CM and other diagnosis coding systems such as DSM-IV. Code auditing for regulatory compliance is emphasized. Prerequisite: BIT207 / 3 credits. Offered: Varies

Pharmacology for Medical Coding
BIT209. Students learn basics of pharmacotherapy as it relates to the duties of a medical coder. Drug classifications and matching drugs to common conditions and laboratory findings are emphasized. Prerequisite: BIT103 / 1 credit. Offered: Varies

Standard Office Procedures
BIT202. Students develop the concepts and skills needed to function effectively in an administrative assistant position. The course includes the following: human relations; customer service; communication services; meetings, minutes, and agendas; travel arrangements and itineraries; financial statements and reports; professionalism; machine transcription; and resumes and interview techniques. Prerequisite: GIT110 / 3 credits. Offered: Spring

Foundations of Game Development
GIT160. This course offers a thorough and insightful introduction to the game development industry. Students learn about the evolution of game development and examine content creation and the concepts behind the development of story, character, environment, level design, user interface, and sound. Game platforms, level design, interface design, project management, serious games, game accessibility, and online applications are explored. Prerequisites: ENL020, ENL050, and (MAT030 or MAT035) / 3 credits. Offered: Fall

JavaScript and jQuery Web Scripting
BIT284. Building on HTML, DHTML, and CSS skills, students learn to use JavaScript and jQuery to create dynamic web sites. XML, AJAX, JSON, and Blogger and API’s for YouTube, Twitter, and Flickr are introduced. Prerequisite: GIT183 / 3 credits. Offered: Varies

Foundations of Game Development
GIT160. This course offers a thorough and insightful introduction to the game development industry. Students learn about the evolution of game development and examine content creation and the concepts behind the development of story, character, environment, level design, user interface, and sound. Game platforms, level design, interface design, project management, serious games, game accessibility, and online applications are explored. Prerequisites: ENL020, ENL050, and (MAT030 or MAT035) / 3 credits. Offered: Fall

JavaScript and jQuery Web Scripting
BIT284. Building on HTML, DHTML, and CSS skills, students learn to use JavaScript and jQuery to create dynamic web sites. XML, AJAX, JSON, and Blogger and API’s for YouTube, Twitter, and Flickr are introduced. Prerequisite: GIT183 / 3 credits. Offered: Varies
PHP and MySQL for Web Development
BIT286. Students build on JavaScript, programming, database, HTML, DHTML, and CSS skills. This course introduces the web developer to the PHP scripting language and the MySQL database system and enables students to plan and develop end-to-end database-driven web sites and applications. Prerequisites: GIT183 and GIT150 / 3 credits. Offered: Varies

Interdisciplinary Studies

The College Experience
COL101. This theme-based seminar is designed to help students develop the skills and confidence necessary to succeed in college, the world of work, and life. In this course, students will examine theories and practices associated with academic success. Areas of study include education and career planning, study skills, effective communication, critical and creative thinking, information literacy, personal management, development of community and awareness of diversity, technology, and leadership. Modeled on the “workshop format” in which students learn by doing, students will be actively engaged in group activities and team projects. Prerequisite: ENL010 / 3 credits. Satisfies a General Education elective. Offered: Fall, Spring, Summer

Experiential Learning Internship and Seminar
EXP101. This course combines an internship experience, where students work in an industry/occupation of interest, with a seminar focusing on practices associated with successful job performance and career advancement. Students reflect upon their experience and examine their potential for career satisfaction and success through interest, skill, value and personality assessments. Students study workplace systems and gain an understanding of professional behaviors and communication practices. Students are responsible to secure site placement; the office of Career Services & Experiential Learning is available to assist with the process. Site placement typically requires 8-15 weeks of preparation; students should plan accordingly. (100 hour internship plus seminar or 150 hour internship plus seminar) Prerequisite: ENL101 and interview with instructor / 3 or 4 credits. Offered: Fall, Spring, Summer

Honors Colloquium
HON200. Honors students experience an interdisciplinary, team-taught colloquium on a current global issue. Students refine their research, writing, critical thinking, and collaborative learning skills as they investigate the topic from a multi-disciplinary perspective. Students complete research projects integrating their findings and present results to an audience. Presentation of Honors research in the Honors Colloquium is required at both the local Honors Reception and at the Annual Undergraduate Research Conference at the Commonwealth Honors College in Amherst. Prerequisite: Twelve successfully completed credits at Cape Cod Community College which include ENL101 and three Honors credits and a 3.2 GPA / 3 credits; may be repeated once for credit.

BIO204. Introduction to Public Health (page 142)
BIT103. Medical Terminology (page 167)
BIT175. Visual Basic Programming (page 167)
COM209. Event Planning (page 145)
ENR101. Intro to Engineering & Advanced Manufacturing (page 152)
GIT110. Microcomputer Applications Software (page 165)
SLR101. Service Learning Option (page 178)

International Studies

Semester Abroad Programs
As a member of the College Consortium for International Studies (CCIS), the College offers the opportunities for students to take part in high-quality, low-cost, fully accredited study abroad programs around the world. Study abroad programs include year-long, semester, and summer courses where students may earn college credit. Study abroad programs are open to Cape Cod Community College full- and part-time students, to students from other colleges, and often to members of the community. Cape Cod Community College also offers a variety of short-term courses facilitated by our faculty. Students typically earn one to three credits per course. Frequently, short-term courses are offered for non-credit to members of the community.

Short-Term Courses Abroad

International Business: A European Experience
BUS225. This course is to be offered at an overseas location in Europe. It is designed to provide the American student with direct contact with contemporaries studying business courses as well as site visits at a variety of European business places. Emphasis is placed on doing business overseas, currency issues, cultural issues, comparative marketing techniques, and basic international law. Prerequisite: BUS100 or any 3-credit Business course (recommend ECO117 or ECO118 or BUS120) and permission of instructor / 3 credits. Offered: Varies

Immersion Study in French Language/Civilization
FRN122. Students study French language and civilization in a Francophone country. Traditional class work is supplemented by cultural activities and field trips. Prerequisite: None / 3 credits. Offered: Spring

Travel and Study in a Spanish Speaking Country
SPN126. This is an educational field trip for Spanish language students enrolled at Cape Cod Community College. Visits could include Spain, Puerto Rico, Costa Rica, Ecuador, or any other Spanish speaking country. (one week to 10 days) Corequisite: Any credit Spanish class at Cape Cod Community College / 1 credit. Offered: Spring

Italian

Conversational Italian
ITAL100. This basic conversational Italian course is designed to introduce the non-native speaker of Italian to the four basic skills necessary to develop a working knowledge of Italian: understanding, speaking, reading, and writing. The emphasis is on speaking and understanding spoken Italian. This course counts toward graduation but does not fulfill a general education distribution requirement. Prerequisite: ENL050 or satisfactory basic skills assessment score / 3 credits. Offered: Fall, Spring

Conversational Italian II
ITAL125. This course is designed to provide continued practice and mastery for the non-native speaker of Italian in the four basic skills necessary to developing a working knowledge of Italian: understanding, speaking, reading, and writing. Prerequisite: ITL100 / 3 credits. Offered: Spring
Immersion Study in Italian Language/Civilization

ITAL122. Students study Italian language and civilization in an Italian speaking country. Forty hours of traditional class work is supplemented by cultural activities and field trips. Prerequisite: None / 3 credits. Offered: Varies

Laboratory for Transfer Students

Special Laboratory in the Life Sciences

BIO199. A laboratory portion of existing life science courses that provides a laboratory experience for only those students who are transferring in credits for life sciences courses that do not match the traditional four-credit format (3 credits lecture, 1 credit laboratory). The life sciences course laboratory selected must closely match the transferred life science course and must have the explicit approval of both the laboratory instructor and the Dean of Science, Technology, Mathematics & Business. Only if seating is available will students be allowed to register for the appropriate laboratory section during the ADD period. Students who transfer in more than one life science course may register twice (but, not for the same laboratory experience) for BIO199. Students with laboratory deficiencies in life sciences courses taken at CCCC will not be allowed to register for BIO199, since the life sciences courses at CCCC are designed and taught such that the laboratory and lecture are non-separable. Prerequisite: Completion of the non-lab portion of a transferred life sciences course and permission of the Academic Dean / 1 credit. Offered: Varies

Special Laboratory in the Physical Sciences

PHY199. A laboratory portion of existing physical science courses that provides a laboratory experience for only those students who are transferring in credits for physical sciences courses that do not match the traditional four-credit format (3 credits lecture, 1 credit laboratory). The laboratory selected must closely match the transferred physical science course, and must have the explicit approval of both the laboratory instructor and the Dean of Science, Technology, Mathematics & Business. Only if seating is available will students be allowed to register for the appropriate laboratory section during the ADD period. Students who transfer in more than one physical science course may register twice (but, not for the same laboratory experience) for PHY199. Students with laboratory deficiencies in physical sciences courses taken at CCCC will not be allowed to register for PHY199, since the physical sciences courses are designed and taught such that the laboratory and lecture are non-separable. Prerequisite: Completion of the non-lab portion of a transferred physical sciences course and permission of the Academic Dean / 1 credit. Offered: Varies

Latin

Introduction to Latin

LAT100. This course introduces students to the Latin language and Roman culture. Learning Latin grammatical structures helps students gain an understanding of English grammar and syntax. Emphasis is on the etymology and morphology of words, and the practice of derivations and cognates allows students to enrich their vocabulary. This language study occurs within the context of Roman culture, which influenced the western world. Prerequisite: ENL020 and ENL080 or satisfactory basic skills assessment scores / 3 credits. Offered: Fall, Spring

Literature

Introduction to Children’s Literature

ENL120. Students survey works drawn from the rich variety of children’s literature. They analyze selections from major genres, discuss historical and contemporary issues, and develop practical ways of involving children in literature. Prerequisite: ENL101 / 3 credits. Satisfies a Humanities & Fine Arts general education requirement. Offered: Fall, Spring, Summer

The Short Story and Human Values

ENL135. Reading and analysis of international short fiction develops recognition of the human values reflected within that fiction. Prerequisite: ENL101 / 3 credits. Offered: Spring

World Mythologies

ENL150. Students study myths from the great cultures of the world. Through readings, discussions, research projects and presentations, students explore the universal values conveyed by these stories from different world cultures. Students discover the symbolism in the events and details of these stories, and they understand mythmaking as a primary human activity. Prerequisite: ENL101 / 3 credits. Satisfies a Humanities & Fine Arts general education requirement. Offered: Fall, Spring

Cape Cod Literature

ENL200. A survey of four centuries of Cape Cod literature, including Native American, journals and records of discovery and settlement, fishing and whaling literature, Cape women’s literature, Thoreau’s nature writing, and contemporary fiction, poetry, and essays. The course explores the Cape’s rich literary heritage, how it reflects the region’s history, culture, and environment, and examines the underlying theme of human and natural change. Field trips and journal keeping are integral to this course. Prerequisite: ENL101 or permission of instructor with submission of writing sample / 3 credits. Offered: Varies

World Literature I

ENL201. Major literary works are studied from the ancient world through the Enlightenment that have both described and shaped western civilization. Prerequisite: ENL102 / 3 credits. Satisfies a Humanities & Fine Arts general education requirement. Offered: Fall / odd

World Literature II

ENL202. Through reading Chinese folktales, Ottoman Empire traditional stories, and European treatises from the Enlightenment, students explore the literary sources of our diverse modern world cultures. An examination of historical texts from revolution to romanticism in western Europe and the Americas, lyric poetry of the Urdu, as well as multiple voices of myriad peoples, provides a framework for studying and comparing universal values through twentieth century texts. Prerequisite: ENL102 / 3 credits. Satisfies a Humanities & Fine Arts general education requirement. Offered: Spring / even

British Literature through the Eighteenth Century

ENL203. Designed for students who have successfully completed both semesters of English Composition and who wish to become familiar with literature that has helped shape contemporary culture. This course surveys representative works and writers in English literature through the 18th century. Prerequisite: ENL102 / 3 credits. Satisfies a Humanities & Fine Arts general education requirement. Offered: Fall / even

British Literature from the Romantic Age to the Present

ENL204. Designed for students who have successfully completed both semesters of English Composition and who wish to become familiar with literature that has helped shape contemporary culture, this course examines representative works and writers in British literature since the mid-eighteenth century. Prerequisite: ENL102 / 3 credits. Satisfies a Humanities & Fine Arts general education requirement. Offered: Spring / even

American Literature to 1890

ENL205. Students examine major contributions to the development of American culture and ideals from the Pilgrims to Henry James. Prerequisite: ENL102 / 3 credits. Satisfies a Humanities & Fine Arts general education requirement. Offered: Fall, Spring

American Literature since 1890

ENL206. Students examine the rise of Realism and Naturalism through fiction and poetry. Prerequisite: ENL102 / 3 credits. Satisfies a Humanities & Fine Arts general education requirement. Offered: Fall, Spring
Shakespeare
ENL207. Students read and discuss representative works by Shakespeare, considering them for their literary value, their relevance to Elizabethan culture, and their expression of our common human experience. Prerequisite: ENL102 / 3 credits. Offered: Fall / odd

Exploring Modern Poetry
ENL210. Students engage in reading, discussing, and writing about poems and poets of the 20th and 21st centuries. Consideration of modern poetry as both literature and art includes individual projects and presentations. Selections are drawn from both major as well as lesser known and culturally diverse poetic voices. Prerequisite: ENL102 / 3 credits. Satisfies a Humanities & Fine Arts general education requirement. Offered: Spring / even

The Contemporary Novel
ENL214. This course introduces the student to the major characteristics of the novel in both form and content. Contemporary novels are examined as one index of cultural values. Students read, write about, and discuss a selection of novels written during the last fifty years. Prerequisite: ENL102 / 3 credits. Offered: Spring / odd

World Religions in Literature
ENL215. World Religions in Literature provides students the opportunity to read, discuss and write about the religions of the world as subthemes in short stories, poetry, novels and literary essays. Included is intensive reading, analysis of world literature and its influence on society, consideration of literary criticisms, and discussion of values/beliefs evident in literature with particular attention to religious themes. Prerequisite: ENL102 / 3 credits. Satisfies a Humanities & Fine Arts general education requirement. Offered: Fall / odd

Exploring the World of Science Fiction
ENL217. Exploring the World of Science Fiction is a course that provides students the opportunity to read, discuss and write about the genre of science fiction in literature. Texts include short stories, poetry, novels, film, and nonfiction. Emphasis is given to reading and analysis of the genre of science fiction and its influence on society and literature. Prerequisite: ENL102 / 3 credits. Satisfies a Humanities & Fine Arts general education requirement. Offered: Fall / odd

The Arthurian Legend
ENL218. This course focuses on the origins, development, structure, and meaning of the Arthurian legend. Students read, discuss, and write about seminal Arthurian texts, and explore connections to mythology, Celtic culture, and European history. Prerequisite: ENL102 / 3 credits. Offered: Spring / odd

Masters of Horror
ENL219. Masters of Horror is a literature course that provides students the opportunity to read, discuss and write about the genre of horror in literature. Texts include short stories, poetry, novels, film, and nonfiction. Emphasis is given to reading and analysis of the genre of horror and its influence on society and literature. Prerequisite: ENL102 / 3 credits. Satisfies a Humanities & Fine Arts general education requirement. Offered: Fall / even

Women Writers
ENL228. This course examines traditions and themes especially important in the development of fiction, nonfiction, poetry, and drama written by women, such as "Women Alone," "Women and Sexuality," "Women and War," "Women in Love." An initial overview describing the emergence of women as authors is provided to establish topical and historical contexts. Readings, drawn primarily from modern texts, offer a diverse range of authors, genres, styles, and cultures. Prerequisite: ENL102 / 3 credits. Satisfies a Humanities & Fine Arts general education requirement. Offered: Fall / even

Selected Topics in Literature
ENL290. Selected Topics in Literature provides students the opportunity to read, discuss and write about a literary specialty. Subjects may include African-American literature, Nobel Prize winning literature, a literary genre, a single author, or a single major work. The course includes intensive reading, analysis of the literature and its influence on society, consideration of criticism of this literature, historical study of the author or authors involved, and discussion of the cultural context of the literature. Specific content depends on the particular subject chosen for study. Prerequisite: ENL102 / 3 credits; may be repeated once for credit. Offered: Varies

Pathology for Massage Therapy
MTC101. Through lecture and laboratory practice, this one-credit course provides an introduction to Shiatsu that increases the massage therapy student's versatility and treatment choices when working with clients and their presenting conditions. Focus is on the concepts of ki, yin and yang, five-element theory, and how to access the body's life-force energy to facilitate health through pressure point (tsubo) work. Preference is given to matriculated Massage Therapy students; others if space is available. It is recommended that the student complete MTC135 (HEA135) prior to this course. Twenty combined lecture and lab hours. Prerequisite: None / 1 credit. Offered: Summer

Pathology for Massage Therapy
MTC116. It is vital to safe and therapeutic practice of massage that the student understands the common pathologic conditions that may be present in clients. This course presents these diseases and conditions as they appear in the systems of the body. Students participate in discussions involving the impact, precautions, and massage treatment techniques for selected conditions. Limited to matriculated Massage Therapy students. Prerequisite: MTC101 and MTC116. Co-requisite: MTC201 and MTC 204 / 3 credits. Offered: Varies

Kinesiology for Massage Therapy
MTC204. This covers a variety of skills that help to protect the health and career longevity of the health worker. Gentle movement forms such as yoga, tai chi, and stretching exercises, and mental clearing and focusing forms such as meditation and guided imagery are practiced. Proper body mechanics are taught, all with an emphasis on self-care and self-awareness. Required for matriculated Massage Therapy students. Prerequisite: None / 1 credit. Offered: Varies

Self-Care for Healthcare Practitioners
MTC210. This covers a variety of skills that help to protect the health and career longevity of the health worker. Gentle movement forms such as yoga, tai chi, and stretching exercises, and mental clearing and focusing forms such as meditation and guided imagery are practiced. Proper body mechanics are taught, all with an emphasis on self-care and self-awareness. Required for matriculated Massage Therapy students. Prerequisite: None / 1 credit. Offered: Varies
Introduction to Complementary Healing Practices  
MTC135. In an experiential teaching/learning format, this course provides an overview of complementary and alternative medicine (CAM) health practices now being utilized by a growing number of health-care consumers. Presentations and demonstrations by practitioners in areas such as herbal medicine, traditional Chinese medicine/ acupuncture, chiropractic, and massage therapy, are an integral part of the course. The history and development of selected CAM practices and systems, how they work, and their relationship to traditional Western medicine is discussed. The concept of “wellness” versus disease treatment, and the mind-body connection are explored. Prerequisite: None / 3 credits. Offered: Fall, Spring, Summer

Massage Therapy II 
MTC201. Through a combination of classroom and clinical laboratory, this course builds on knowledge and skills acquired in MTC101. Students are introduced to a variety of advanced massage techniques such as lymphatic, trigger point, myofascial, and passive exercise. Students demonstrate techniques that are within the scope of practice and training for massage therapy disciplines. Increased competency in musculoskeletal palpation and pain associated with various massage techniques are explored. Students develop appropriate treatment plans. Students develop self-care skills that help to protect the health and career longevity of the massage therapist. Limited to matriculated Massage Therapy students. Prerequisite: MTC101; Co-requisite: MTC110 / 4 credits. Offered: Varies

Massage Therapy Clinical Practicum I 
MTC204. (formerly MTC205) Through hands-on practice in the clinical laboratory, this course provides massage therapy students the opportunity to improve their skills in all Swedish massage techniques in a supervised clinical setting. The focus is on integrating assessment skills, therapeutic communication, massage techniques, safe hygiene and sanitation skills, treatment documentation, and problem solving in a real world client situation. Limited to matriculated Massage Therapy students who have successfully completed MTC204 and are concurrently taking MTC210. Prerequisite: MTC204; Co-requisite: MTC210 / 1 credit. Offered: Varies

Massage Therapy Clinical Practicum II 
MTC206. Through hands-on practice in the clinical laboratory, this course provides massage therapy students the opportunity to improve their skills in all Swedish massage techniques in a supervised clinical setting. The focus is on integrating assessment skills, therapeutic communication, massage techniques, safe hygiene and sanitation skills, treatment documentation, and problem solving in a real world client situation. Limited to matriculated Massage Therapy students who have successfully completed MTC204 and are concurrently taking MTC210. Prerequisite: MTC204; Co-requisite: MTC210 / 1 credit. Offered: Varies

Massage Therapy III 
MTC210. Through a combination of classroom and clinical laboratory this course builds on the knowledge and skills acquired in MTC101 Massage Therapy I and MTC201 Massage Therapy II. Students learn a variety of specialized massage techniques such as hydrotherapy and temperature therapies, sports massage and massage for special populations. Through the integration of therapeutic communication, assessment skills and knowledge of common acute and chronic illnesses, students develop appropriate treatment plans. Students are introduced to extensive self-care techniques to promote longevity in this profession. Limited to matriculated Massage Therapy students. Prerequisite: MTC201; Co-requisite: BIO105 / 4 credits. Offered: Varies

Massage Therapy Professional Ethics and Practice Management 
MTC225. This course offers theory and practice for successful management of a Massage Therapy business, from planning, financing and marketing, to communicating with clients, record-keeping, and managing time. A primary focus of this course is the ethical guidelines and appropriate professional boundaries, essential to a successful massage therapy practice. It is recommended that this course be taken after or concurrent with MTC201 and MTC205. Prerequisite: MTC101 / 2 credits. Offered: Fall, Spring, Summer

Mathematics 
Also see Developmental Education and Computer Science.

Course descriptions for the following courses are listed under Developmental Education.

MAT010. Fundamental Arithmetic  
MAT025. Prealgebra  
MAT035. Algebra for Non-STEM  
MAT040. Intermediate Algebra  
MAT041. Elementary Algebra for STEM  
MAT045. Intermediate Algebra for STEM

Mathematics for Elementary and Early Childhood Educators I 
MAT120. This course is designed for students planning to teach Elementary or Early Childhood Education. Students develop an understanding of the mathematical content of numbers and operations at the deep level required for successful elementary school teaching in ways that are meaningful to pre-service elementary and early childhood educators. Topics include: critical thinking skills; sets and operations on sets; the whole number system and its operations; place value and arithmetic models; mental math; algorithms; pre-algebra; factors, divisibility, prime numbers, elementary number theory, and their applications; the integers and its operations; clock arithmetic, fractions and rational numbers; decimals and the real number system; ratios, rates, and proportions; and percents. (4 contact hours) Prerequisite: MAT035 or satisfactory basic skills assessment score and ECE100 or EDU101/3 credits. Offered: Fall, Spring, Summer

Mathematics for Elementary and Early Childhood Educators II 
MAT121. This course is designed for students planning to teach Elementary or Early Childhood Education. Successful elementary school teaching in ways that are meaningful to pre-service elementary and early childhood educators. Topics include: Two- and Three-dimensional Geometry; Measurement; Data Analysis; Single Variable Statistics; Probability. (4 contact hours) Prerequisite: MAT120 / 3 credits. Satisfies a Mathematics/Quantitative Reasoning general education requirement. Offered: Fall, Spring, Summer

Survey of Mathematics 
MAT140. Designed for liberal arts students. Emphasis is on mathematics as the study of patterns and on mathematical thinking as the making and proving of conjectures. Topics: logic, number sequences, functions and graphs, large numbers and logarithms, geometry, symmetry and regular figures, methods of counting, probability, introductory statistics, finance, and topology. The history, philosophy, and applications of mathematics are interwoven. (4 contact hours) Prerequisite: (MAT035 or MAT040) or satisfactory basic skills assessment scores / 3 credits. Satisfies a Mathematics/Quantitative Reasoning general education requirement. Offered: Fall, Spring, Summer
Elementary Statistics
MAT150. An introduction to descriptive and inferential statistics that emphasizes statistical literacy and conceptual understanding. Topics include: techniques for organizing and presenting data, measures of central tendency and dispersion, probability, discrete and continuous probability distributions, sampling distributions, estimation, one-sample hypothesis tests, and correlation and regression. (4 contact hours) Prerequisite: MAT035 or MAT040 or satisfactory basic skills assessment score / 3 credits. Satisfies a Mathematics/Quantitative Reasoning general education requirement. Offered: Fall, Spring, Summer

Finite Mathematics
MAT165. An introduction to selected applications of mathematics in business, management, social sciences, and economics. Topics include: elementary descriptive statistics, graphing of functions, simple and compound interest, functions and their applications, probability, and elements of mathematical modeling using first and second degree polynomials. (4 contact hours) Prerequisite: MAT035 or MAT040 or satisfactory basic skills assessment score / 3 credits. Satisfies a Mathematics/Quantitative Reasoning general education requirement. Offered: Fall, Spring, Summer

College Algebra
MAT175. This is an entry-level mathematics course for students interested in a STEM (Science, Technology, Engineering, Math) track. Topics include: domain and range, piecewise functions, complex numbers, quadratic inequalities, graphs of polynomial and rational functions, fundamental theorem of algebra, transformations of graphs, inverse functions, solving exponential and logarithmic equations, Gaussian elimination, and translations of conics. Critical thinking and problem solving skills are emphasized throughout the course. This course prepares students for Precalculus with Trigonometry or Applied Calculus. (5 contact hours) Prerequisite: MAT045 or satisfactory basic skills assessment score / 4 credits. Satisfies a Mathematics/Quantitative Reasoning general education requirement. Offered: Fall, Spring, Summer

Applied Calculus
MAT180. (formerly Business Calculus I) This course is designed for students planning to apply mathematics to management and social science topics. Topics include: a review of polynomial, exponential, and logarithmic functions and their application to business, an introduction to limits, continuity and the derivative, and applications of the derivative. Prerequisite: MAT171 or MAT175 / 3 credits. Offered: Varies

Business Calculus II
MAT185. This course is designed for students seeking a background in mathematical modeling and applied calculus and/or intending to pursue transfer study in business administration or in social science disciplines requiring calculus. The topics covered include: the integral and its applications, and techniques of integration. Additional topics are selected from probability distributions, differential equations, multivariable calculus, and Taylor Series. Prerequisite: MAT180 / 3 credits. Offered: Varies

Precalculus with Trigonometry
MAT195. Targeting students in Mathematics, Engineering, and Physical Sciences, this course provides the foundation necessary for a rigorous study of calculus. It covers non-linear inequalities, functions, and graphs. The primary focus is on polynomial, rational, exponential, logarithmic, and trigonometric functions. Applications are also discussed extensively. Additional topics may include analytic geometry with an emphasis on the conic sections, Gibbs notation vector algebra, polar coordinates, sequences, series, and mathematical induction. (5 contact hours) Prerequisite: MAT175 / 4 credits. Offered: Fall, Spring, Summer

The following three courses (MAT240, MAT250, MAT260) constitute a coordinated calculus sequence. Students should complete at least the first two semesters.

Calculus I
MAT240. This first course in calculus covers basic concepts, methods, and applications suitable for engineering, natural sciences, computer science, or mathematics majors. It is designed for students with interests in mathematics, the natural sciences, or engineering. Coverage and emphasis is given to methods of solution, precise statement of theorems and definitions, problem applications. Prerequisite: MAT250 / 3 credits. Offered: Varies

Calculus II
MAT245. This second course in calculus covers advanced concepts, methods, and applications introduced in MAT240. Topics include: limits, continuity, derivatives, integrals, fundamental theorem, applications on curve sketching, optimization, areas, and volumes. Prerequisite: MAT250 / 4 credits. Offered: Fall, Spring, Summer

Calculus III
MAT250. Continuation of MA240. The calculus of the logarithmic, exponential, and trigonometric functions; techniques of integration, polar coordinates; sequences and series. Prerequisite: MAT240 or MAT185 / 4 credits. Offered: Varies

Medical Interpreter
Medical Interpreter I
MIN101. (formerly HEA145) This introductory course, designed for individuals who are bilingual in English and Spanish or English and Portuguese, focuses on the basic competency skills necessary to work as a trained medical interpreter. The course adheres to the Standards of Practice for medical interpreters as established by the National Council on Interpreting in Healthcare. Prerequisite: ENL020 and ENL050 or satisfactory basic skills assessment score or ESL201 and target language assessment conducted in the first class session / 3 credits. Offered: Varies

Medical Interpreter II
MIN102. This course is designed for students continuing the study of medical interpreter practice and for experienced medical interpreters. The focus is on necessary advanced competency skills, written translation, and vocabulary. Prerequisite: BIT103 and MIN101 with a grade of C or higher / 3 credits. Offered: Varies
Medical Interpreter Practicum  
MIN200. This course, designed for individuals who are bilingual in English and Spanish or English and Portuguese, will focus on skills acquired during coursework in Medical Interpreter I and Medical Interpreter II. The course adheres to the Standards of Practice for medical interpreters as established by the National Council on Interpreting in Healthcare. Students complete 150 hours of supervised medical interpreter activity in a community healthcare organization. Prerequisite: MIN102. Co-requisite: BIO105 / 3 credits. Offered: Varies

Music  
Music Appreciation  
MUS100. A survey of development of music from the Renaissance to the present including jazz and the contemporary scene. Emphasis on basic musical materials and principles of design. This course is for students not planning to major in music; no previous musical training required. Prerequisite: ENL010 and ENL040 or satisfactory basic skills assessment score / 3 credits. Satisfies a Humanities & Fine Arts general education requirement. Offered: Fall, Spring, Summer

Music Theory I  
MUS101. This course examines the fundamental materials, including pitch, rhythm, tonal systems, ear training, and basic harmony for those wishing to learn or to improve music reading skills. Students practice in performance and composition for instruments and voice. Prerequisite: ENL010 and ENL040 / 3 credits. Offered: Fall, Spring, Summer

Music History I  
MUS102. This course is a detailed study of styles and forms of music from ancient cultures to eighteenth century classicism. Major compositions, personalities, styles, and forms explored through structured listening, analysis, and reading assignments. Prerequisite: ENL010 and ENL040 or satisfactory basic skills assessment score / 3 credits. Satisfies a Humanities & Fine Arts general education requirement. Offered: Fall

Music History II  
MUS103. This course is a detailed study of styles and forms of music from the eighteenth-century to the present. Major compositions, personalities, styles, and forms are explored through structured listening, analysis, and reading assignments. Prerequisite: ENL010 and ENL040 or satisfactory basic skills assessment score / 3 credits. Satisfies a Humanities & Fine Arts general education requirement. Offered: Spring

Fundamentals of Music  
MUS104. This course introduces the fundamental materials of music, including pitch, rhythm, scales, ear training, and basic melodic notation. Elementary principles of vocal tone production are explored, and basic keyboard technique is introduced. Prerequisite: None / 3 credits. Offered: Fall, Spring

Select Chorus  
MUS113. Select Chorus provides an opportunity for experienced vocalists to rehearse and perform challenging music from a variety of modern musical styles. All participants are expected to be able to read music at a moderate degree of proficiency and produce a controlled vocal quality. (2 hours per week plus 2 dress rehearsals and a final performance). Prerequisite: Interview/Audition / 1 credit. May be repeated for credit up to 6 hours. Offered: Fall, Spring

History of Rock Music  
MUS116. This course explores the origins, characteristics and stylistic development of rock music. The emphasis is on the artists, songwriters, and producers who have created the most famous hits and long term trends. Prerequisite: ENL010 and ENL040 or satisfactory basic skills assessment score / 3 credits. Satisfies a Humanities & Fine Arts general education requirement. Offered: Fall, Spring

Applied Music  
MUS120. Students receive private instruction in vocal or instrumental music, appropriate to the level of the student. (15 one-half hour tutorial lessons) There is an Applied Music charge. Prerequisite: Assessment Audition / 1 credit. May be repeated for credit; 6 credit maximum. Offered: Fall, Spring, Summer

Advanced Applied Music  
MUS121. This course provides private instruction in vocal or instrumental music, appropriate to the level of the student. There is an Applied Music charge. (15 one-hour tutorial lessons) Prerequisite: Interview/Assessment Audition / 2 credits. May be repeated for credit; 6 credits maximum. Offered: Fall, Spring, Summer

Beginning Guitar  
MUS122G. Students study, rehearse, and perform music in a small group setting. Emphasis is placed on learning to read standard musical notation, with attention also given to chords. Performances on campus and in the immediate community are part of class activities. Students are expected to provide their own guitar. Prerequisite: None / 1 credit. Offered: Fall, Spring

Beginning Piano  
MUS122P. Students study, rehearse and perform keyboard music in a class setting. Emphasis is placed on learning to read standard musical notation in bass and treble clefs. Performances on campus and in the immediate community are part of class activities. Students are expected to provide their own portable keyboard. (3 hours per week for 7 weeks) Prerequisite: None / 1 credit. Offered: Fall, Spring

Jazz Combo  
MUS123. Students rehearse and perform jazz in a variety of styles which may include: blues, Dixieland, swing, bebop, Latin, and rock. Performances on campus and in the immediate community are part of Jazz Combo activities. Students are expected to be able to read standard music notation. (Three class hours per week plus one dress rehearsal and one performance near the end of the semester.) Prerequisite: MUS101 or ability to read from standard musical notation / 1 credit. May be repeated for credit; 6 credit maximum. Offered: Fall, Spring

Guitar II  
MUS124G. This continuation of Beginning Guitar course involves study, rehearsal, and performance of music in a class of up to 12 guitars. Emphasis is placed on expanding the students’ abilities to read and perform from standard musical notation in treble clef and chord symbols. Repertoire varies from one semester to the next. Performances on campus and in the immediate community are part of class activities. Students are expected to provide their own instrument. Prerequisite: MUS122 or permission of the instructor / 1 credit; may be repeated; 6 credits maximum. Offered: Fall, Spring

Piano II  
MUS124P. This is a continuation of MUS122P Beginning Piano. Students study, rehearse and perform keyboard music in a class setting. The emphasis is placed on expanding the students’ ability to read and perform from standard musical notation in treble clef and bass clefs. Performances on campus and in the immediate community are part of class activities. Students are expected to provide their own portable keyboard. Prerequisite: MUS122-P / 1 credit; may be repeated for credit; 6 credits maximum. Offered: Fall, Spring

Music Theory II  
MUS202. This course is a continuation of MUS101 with emphasis on harmony and form. Prerequisite: MUS101 or permission of instructor / 3 credits. Satisfies a Humanities & Fine Arts general education requirement. Offered: Spring
Songwriting
MUS205. Students learn how to compose songs and discover the relationships among melody, harmony, rhythm, and lyrics (when present). Through analysis, students explore why hit songs are successful. Attention is also paid to creating stylistically appropriate introductions and endings, interludes, popular "hooks," and complete arrangements. Prerequisite: MUS101 / 3 credits. Offered: Spring

Nursing
Also see Fitness, Health Sciences, and Information Technology.

Medical Terminology
BIT103. Refer to Information Technology.

Advanced Rehabilitation Nursing Assistant
CNA113. This course is designed to enhance the knowledge of Rehabilitation and Restorative Care Concepts for the Nursing Assistant working in a variety of settings with people of all ages. Prerequisite: Documentation of at least a 75-hour nursing assistant and/or home health aide course / 1 credit. Offered: Varies

Effective Strategies for Working with Alzheimer’s Patients
CNA114. This course is designed to offer caregivers of persons with Alzheimer’s disease a variety of strategies to use in meeting the person’s needs and understanding and dealing with often difficult behaviors. Prerequisite: None / 1 credit. Offered: Varies

Tri-level Nursing Assistant / Home Health Aide
CNA117. This 140-hour course (75 classroom and lab, and 65 hours of supervised clinical practice) teaches basic nursing skills and beginning interpersonal relationship techniques to entry-level students in the classroom and clinical area. The curriculum is divided into three levels of care: long-term, home health, and acute. It is possible to exit with certification upon completion of any one of the levels. Applicants must attend an information session prior to admission. Prerequisite: None / 6 credits. Offered: Fall, Spring

Rehabilitation / Restorative Aide
CNA138. This course is designed to enhance the knowledge of the nursing assistant/home health aide in the field of rehabilitation/restoration through a combination of classroom and laboratory practice. Students acquire the skills to assist in the day-to-day rehabilitation plan of care established by and under the supervision of the physical therapist, occupational therapist, speech therapist and/or the registered nurse in a variety of settings. Prerequisite: High school diploma or HiSET/GED and documented completion of at least a 75-hour nursing assistant or home health aide course / 3 credits. Offered: Varies

Pharmacology Calculations
NUR100. This course examines the methods of dosage calculation required for safe administration of medications to children and adults. Interpretation of medical orders and systems of measurements are included. Introduces dimensional analysis to convert and calculate dosages of oral, parenteral, and intravenous medications. Prerequisite: MAT030 or MAT035 or satisfactory basic skills assessment score / 1 credit. Offered: Fall, Spring, Summer

Fundamentals of Nursing
NUR107. This course is designed to enhance the knowledge of rehabilitation and restorative care concepts for the nursing assistant working in a variety of settings with people of all ages. Prerequisite: Documentation of at least a 75-hour nursing assistant and/or home health aide course / 1 credit. Offered: Varies

Physical and Mental Health I
NUR201. This course focuses on the patient/client across the life span with acute major health problems. The curriculum builds upon knowledge of scientific principles and utilization of critical thinking. Nursing process, interpersonal communication, stress adaptation, cultural competence and environmental influences are integrated. The structured acute care setting and the on-campus nursing laboratory are primarily utilized for application of nursing knowledge and development of clinical skills. Campus laboratory experiences are assigned in addition to class and clinical schedule. (6 class hours / 12 laboratory hours) Prerequisite: NUR108 or NUR132 and current CPR certification. Corequisite: BIO201 and HEA200 / 10 credits. Offered: Fall

Nursing Across the Life Span
NUR108. Basic concepts of human development, human behavior and scientific principles are applied to the care of the childbearing family, children and adults with health problems. The cycle from infancy to the older adult is integrated with emphasis on developmental stressors and the role of family and community. This course builds upon and expands basic concepts of health assessment, interpersonal and psychomotor nursing skills. Nursing process is applied to the childbearing family, the child from infancy to adolescence and the young, middle and older adult. Nursing care of patients with selected health problems related to nutrition/fluid balance and activity/exercise is integrated. Nursing care of the preoperative patient is included. Correlated clinical laboratory experiences with faculty guidance are required. (4 class hours / 12 laboratory hours) Prerequisite: NUR107, (BIO108 or BIO252), ENL101, and PSY101. Co-requisite: PSY233 / 8 credits. Offered: Spring
Physical and Mental Health II
NUR202. This course is the continued study of patient/client needs within an integrated framework. Focus is on the patient/client across the life span with chronic health problems. Emphasis is on the areas of rehabilitation, gerontology, mental health and community. Psychiatric, rehabilitation, medical-surgical and community-based agencies are utilized for application of nursing knowledge and clinical skills. Campus laboratory experiences are assigned in addition to class and clinical schedule. (4 class hours / 12 laboratory hours) Prerequisite: NUR201, BIO201, and HEA200 / 8 credits. Offered: Spring

Foundations of the Profession
NUR203. This course analyzes the practice of nursing in contemporary society. Historical perspectives and current issues and trends are studied. Accountability, legal responsibilities of licensure, the ethical issues arising in the present health care systems, and leadership and management in nursing are major units of study. Political, economic, social, and cultural influences in nursing practice are considered. Prerequisite: NUR201 / 3 credits. Offered: Spring

Paralegal

Introduction to Substantive Law
LGS130. (replaces BIT130) This course is an introduction to the basic concepts of law and the judicial system. Students obtain an overview of criminal law, torts, property, contracts, wills, trusts, and employment law. Particular attention is given to general skills required of paralegals. Prerequisite: None / 3 credits. Offered: Fall

Family Law
LGS131. (replaces BIT131) The law of marriage, divorce, annulment, legal separation, pre-marital agreements, cohabitation, child support, alimony, and adoption are studied, as well as their implementing procedures. Prerequisite: LGS130 / 3 credits. Offered: Fall / even

Law Office Management
LGS132. (replaces BIT132) Students learn to work in a law office environment and receive hands-on training in billing, basic bookkeeping, form preparation and library maintenance. Legal ethics, attorney/client relationships, and the paralegal’s role in maintaining files, libraries, and client confidentiality are stressed. Co-requisite: LGS130 / 1 credit. Offered: Spring

Legal Research and Writing
LGS133. (replaces BIT133) This course is an introduction to the methods and materials employed in legal research and the writing of legal memoranda and briefs. Emphasis is placed on how and where to locate the law and how to present the law that is found in those sources. Many different strategies of research are explored including computer resources and online database research. Prerequisite: LGS130 and ENL101 and two of the following: (LGS131, LGS134, LGS135, LGS136, LGS137) / 3 credits. Offered: Spring

Real Estate, Mortgages and Landlord-Tenant Law
LGS134. (replaces BIT134) This course is a study of the law of real property with special emphasis on both substantive law and practical considerations including drafting of real estate contracts and documents, title examinations, and an understanding of the mortgage lending field. Particular attention is given to the skills needed by paralegals including closing documents. Prerequisite: LGS130 / 3 credits. Offered: Spring / odd

Civil Litigation
LGS135. (replaces BIT135) This course covers basic steps in lawsuits from the initial interview through the appellate process. Students learn how to prepare complaints, answers, motions, discovery, and study in-depth the different phases of a civil trial. Prerequisite: LGS130 / 3 credits. Offered: Fall

Estate Planning, Wills, Trusts and Probate Procedures
LGS136. (replaces BIT136) This course covers the procedure, techniques and the substantive law in the planning of estates from simple wills to more complicated trusts. Students also learn to administer the estate of the deceased and study the tax consequences involved. Prerequisite: LGS130 / 3 credits. Offered: Spring / even

Contracts, Business Organizations and Transactions
LGS137. (replaces BIT137) Students are introduced to the Law of Contracts with an emphasis on understanding the interrelationships among concepts and the tools required in drafting good solid contracts. Students learn how to choose and organize the different types of business organizations such as sole proprietorships, partnerships, limited liability entities, and corporations. Prerequisite: LGS130 / 3 credits. Offered: Fall / odd

Criminal Law and Procedure
LGS138. (replaces BIT138) This course is a study of criminal law and procedure with special emphasis on both substantive and procedural criminal law and constitutional issues. Students learn to draft motions and other documents necessary for criminal defense and prosecution, prepare affidavits, briefs, and discovery. Particular attention is given to the skills needed by paralegals to assist attorneys and other legal professionals. Co-requisite: LGS130 / 3 credits. Offered: Fall

Internship in Paralegal Studies
LGS238. (replaces BIT238) Students spend the semester (180 hours, at least 12 hours per week) working in a paralegal setting, either in a private law firm or for a government or non-profit agency such as the Sheriff's department, District Attorney's office, court, or Legal Aid Office. Participation in this course is subject to availability of placements, application and acceptance into the course. Prerequisite: LGS130, LGS133, LGS135 and (LGS131 or LGS134 or LGS136 or LGS137). The fourth prerequisite must reflect the type of legal practice in which he/she will intern. A 3.00 grade point average is required / 3 credits. Offered: Fall, Spring

Philosophy

Introduction to Philosophy
PHI130. This course provides the student with an introduction to six major issues in philosophy. Although the course is essentially an “isms” course, there is substantial and focused emphasis on historical development. In every section of the course, original source materials are read and used. Prerequisite: None / 3 credits. Satisfies a Behavioral & Social Sciences general education requirement. Offered: Fall, Spring

Logic
PHI131. This course is an introduction to the principles of logic. It is designed for students who wish to develop their habits of thinking clearly and logically in the everyday world as well as in specialized areas such as science and technology. Although there is some coverage of informal logic, the thrust of the course is on formal logic including the following topics: deduction and syllogistic logic, symbolic logic, and induction and scientific method. Prerequisite: ENL 101 or PHI130 / 3 credits. Satisfies a Humanities & Fine Arts (or) Behavioral & Social Sciences general education requirement. Offered: Varies
Three Great Thinkers

PHI160. Students in this course engage in a critical examination of a number of contemporary seminal ideas central to the human experience of both Eastern and Western thinkers. Students study the writings of three major thinkers in the history of ideas. The three are announced before pre-registration each semester and vary from semester to semester, so the course is never the same. Students explore the ideas in the course for internal consistency and for the historical context in which they arose, as well as the actual consequences those ideas have had in human affairs. Prerequisite: ENL101 and a previous philosophy course / 3 credits; may be repeated once. Satisfies a Humanities & Fine Arts (or) Behavioral & Social Sciences general education requirement. Offered: Varies

Ethics

PHI210. This course provides the student with a comprehensive analysis of the multifaceted view toward life which has come to be known as existentialism. Social, moral, legal, religious, literary, as well as epistemological and metaphysical aspects of the existentialistic point of view, are considered. Prerequisite: ENL101 or PHI130 / 3 credits. Satisfies a Humanities & Fine Arts (or) Behavioral & Social Sciences general education requirement. Offered: Spring

Existentialism

PHI201. This course provides the student with a comprehensive analysis of the multifaceted view toward life which has come to be known as existentialism. Social, moral, legal, religious, literary, as well as epistemological and metaphysical aspects of the existentialistic point of view, are considered. Prerequisite: ENL101 or PHI130 / 3 credits. Satisfies a Humanities & Fine Arts (or) Behavioral & Social Sciences general education requirement. Offered: Varies

Selected Topics in Philosophy

PHI241. This course serves as a vehicle to either deepen students' knowledge of subjects addressed in Philosophy introductory courses or explore issues outside the traditional curriculum. Prerequisite: Any introductory level Philosophy course / 3 credits; may be repeated once; 6 credit maximum. Offered: Varies

Physics

The following two courses (PHY151, PHY152) constitute a physics sequence that covers physics without the use of calculus.

Physics I (formerly PHY101)

PHY151. First semester of a two-semester introduction to college physics without calculus. This course covers mechanics (kinematics, dynamics and statics), relativity and some heat. The course is appropriate for any student interested in science and particularly appropriate for health sciences and pre-professional students. (3 class hours / 2 laboratory hours) Prerequisite: (MAT040 or MAT110 or MAT035), and ENL020 and ENL050 or satisfactory basic skills assessment scores / 4 credits. Satisfies a Natural or Physical Science general education requirement. Offered: Fall, Summer

Physics II (formerly PHY102)

PHY152. Second semester of a two-semester introduction to college physics without calculus. This course covers vibrations and waves; electricity and magnetism; light and optics; and some modern physics. The course is appropriate for non-science majors who are interested in science. (3 class hours / 2 laboratory hours) Prerequisite: A grade of C or higher in (PHY101 or PHY151) / 4 credits. Satisfies a Natural or Physical Science general education requirement. Offered: Spring

Survey of Physics

PHY106. Classical and modern physics presented conceptually and experimentally for students desiring a one-semester introduction to physics. The class emphasizes verbal and conceptual understanding of the way the world works using as little mathematics as possible. This course is appropriate for non-science majors and as a preparation for PHY211. (3 class hours / 2 laboratory hours) Prerequisite: (MAT030 or MAT035), ENL020, ENL050 or satisfactory basic skills assessment scores / 4 credits. Satisfies a Natural or Physical Science general education requirement. Offered: Varies

The following two courses (PHY211, PHY212) constitute a traditional university parallel calculus-based physics sequence. These courses are appropriate for math, science, and engineering students.

University Physics I

PHY211. First semester of a two-semester introduction to university physics. This course covers mechanics (kinematics, dynamics and statics), relativity and some heat. The course is appropriate for math, science, and engineering students. Calculus is used. Previous experience in physics (such as PHY106) is strongly recommended. Students must have taken or be currently enrolled in MAT240, Calculus I. (3 lecture hours / 2 laboratory hours / 1 recitation hour) Prerequisite: MAT195; co-requisite: MAT240 / 4 credits. Satisfies a Natural or Physical Science general education requirement. Offered: Varies

University Physics II

PHY212. Second semester of a two-semester introduction to university physics using calculus. This course covers vibrations and waves; electricity and magnetism; optics; and a brief introduction to modern physics. The course is appropriate for math, science, and engineering students. Calculus will be used throughout the course. Students must have taken or be currently enrolled in MAT250, Calculus II. (3 lecture hours / 2 laboratory hours / 1 recitation hour) Prerequisite: A grade of C or higher in PHY211 / 4 credits. Satisfies a Natural or Physical Science general education requirement. Offered: Varies

Cooperative Work Experience in the Natural Sciences

SCI261. Refer to Biology.

Political Science

Comparative Politics

GOV101. This course is designed as an introduction to the basic concepts and themes in comparative politics. Using a case studies approach, the course compares and contrasts states according to political ideology, process, socialization, historical evolution, public policy, state institutions, and governmental systems. Prerequisite: None / 3 credits. Satisfies a Behavioral & Social Sciences general education requirement. Offered: Fall
International Relations
GOV102. This course features an historical examination of the fundamentals of international relations in theory and practice. Topics pertaining to developed and developing nations, security, power, science and technology, and international organizations are discussed with emphasis on the 20th and 21st centuries. Prerequisite: ENL050 or satisfactory basic skills assessment score / 3 credits. Satisfies a Behavioral & Social Sciences general education requirement. Offered: Spring

Conversational Brazilian Portuguese I
PRT100. This basic conversational Brazilian Portuguese course is designed to introduce the non-native speaker of Portuguese to the four basic skills necessary to develop a working knowledge of Portuguese: understanding, speaking, reading, and writing. Prerequisite: ENL050 or satisfactory basic skills assessment score / 3 credits. Offered: Fall, Spring

The American Presidency
GOV110. This course explores the responsibilities, staff, functions, and limitations of the modern American presidency. While the course covers the origins of the presidency, the reading and lecture material focuses on the modern American presidency in the post-1932 period. This course explores the cultural, social, and economic changes that have wrought political changes in the meaning and role of the presidency. Prerequisite: None / 3 credits. Offered: Fall

American Government
GOV111. This course provides an introductory examination of the federal government. Emphasis is placed upon the political system in both principle and practice, the structure of our government, and public safety. Prerequisite: None / 3 credits. Satisfies a Behavioral & Social Sciences general education requirement. Offered: Fall, Spring, Summer

Psychology

Conversational Brazilian Portuguese II
PRT125. This basic conversational Brazilian Portuguese II course is designed to provide continued practice and mastery for the non-native speaker of Portuguese in the four basic skills necessary to develop a working knowledge of Portuguese: understanding, speaking, reading, and writing. Prerequisite: PRT100 / 3 credits. Offered: Fall, Spring

Psychology of Career Development
PSY100. This course introduces students to the lifelong career development process. Students gain self-knowledge through assessment of interests, abilities, values and personality. Influences on career aspirations are explored. Students identify and investigate potential career options. Decision making skills are employed to develop career goals and action plans. Students are introduced to the benefits of networks, mentors, and role models. Students develop job search materials including a résumé and cover letter. Students gain familiarity with the process and skills for employment interviewing. Prerequisite: None / 1 credit. Offered: Fall, Spring

General Psychology
PSY101. Introduction to the major concepts and principles underlying human behavior and mental processes. Topics include personality theory, development, learning and thought, brain and nervous system, sensation and perception, motivation and emotion, stress and physical health, abnormal psychology, psychotherapy, and social psychology. Prerequisite: ENL020 and ENL050 or satisfactory basic skills assessment scores / 3 credits. Satisfies a Behavioral & Social Sciences general education requirement. Offered: Fall, Spring, Summer

PSY208. Analysis of a variety of life crises, methods of effecting intervention, and procedures for establishing a counseling relationship when appropriate. Designed to introduce those now in, or preparing for, the helping professions or related paraprofessional positions to the principles of effective crisis intervention and counseling. Prerequisite: PSY101 / 3 credits. Satisfies a Behavioral & Social Sciences general education requirement. Offered: Fall, Spring

Adolescent Psychology
PSY202. Physical, emotional, intellectual, and social development of the human being during adolescence. Suggested for students planning to major in psychology, education, social work, or related areas. Prerequisite: PSY101 / 3 credits. Satisfies a Behavioral & Social Sciences general education requirement. Offered: Fall, Spring

Abnormal Psychology
PSY207. This course includes the study of the major psychiatric disorders such as depression, anxiety, and schizophrenia. Analysis is made of the probable causes of these disorders with emphasis on the strengths and limitations of the commonly used therapies. Consideration is given to positive, constructive, alternative responses to the basic problems of living. Prerequisite: PSY101 / 3 credits. Satisfies a Behavioral & Social Sciences general education requirement. Offered: Fall, Spring, Summer

Principles of Counseling and Crisis Intervention
PSY208. Analysis of a variety of life crises, methods of effecting intervention, and procedures for establishing a counseling relationship when appropriate. Designed to introduce those now in, or preparing for, the helping professions or related paraprofessional positions to the principles of effective crisis intervention and counseling. Prerequisite: PSY101 / 3 credits. Satisfies a Behavioral & Social Sciences general education requirement. Offered: Fall, Spring

Group Dynamics in Human Services
PSY209. This course explores the various stages of therapeutic groups, including group development. Emphasis is on basic group theory, process, and effective practice skills. Students are acquainted with task-oriented and treatment-oriented groups in a broad range of settings. This course may incorporate experiential learning where students learn about group processes via group exercises in class. Service Learning may be required. Prerequisite: PSY101 or SOC106 / 3 credits. Offered: Fall, Spring

PSY201. This course focuses on important aspects of physical, cognitive, social and emotional development, occurring from the prenatal period through middle school. The major theories of development, research methods and the important roles of genetics and neuroscience are discussed. Emphasis is placed on the role of early experiences and biological factors in the later formation of personality, intellectual and emotional behaviors. Prerequisite: PSY101 / 3 credits. Satisfies a Behavioral & Social Sciences general education requirement. Offered: Fall, Spring, Summer
Human Sexuality
PSY212. This course explores the physiological, psychological, and sociological aspects of human sexuality. Sexuality is considered as a natural, healthy function and a vital part of the total human organism. Issues of psychosexual development, sexual physiology, sexual attitudes, gender identity, love and sex, sex and the law, different sexual lifestyles, and sexual dysfunction, among others, are discussed in an open, frank manner. Audio/visual material, Internet web sites, and discussion forums augment the textbook and lecture content. Prerequisite: PSY101 / 3 credits. Satisfies a Behavioral & Social Sciences general education requirement. Offered: Fall, Spring, Summer

Social Science Research Methods
PSY216. This course introduces the basic research techniques and skills of the social sciences through an interdisciplinary, topical approach. Qualitative and quantitative research methods including ethnography, observation, survey and experimentation are discussed, demonstrated and practiced. Topics include formulating social science hypotheses, identifying variables, constructing and interpreting questionnaires, interviewing, and observing participants. Other topics include social scientists’ use of statistics; research ethics; interpretation and communication of research findings, and the relevance of research to public policies in our society. Students may not earn credit for SOC225. Prerequisite: PSY101 and (MAT020 or MAT025) / 3 credits. Offered: Varies

Psychology of Women
PSY219. This course is designed for both females and males wishing a broader understanding of the physiological, psychological, and sociological determinants of female growth and development. It concentrates on developmental issues and contemporary role expectations, conflicts, and the status of women within a culturally defined role throughout the life cycle. Prerequisite: PSY101 / 3 credits. Satisfies a Behavioral & Social Sciences general education requirement. Offered: Varies

Social Psychology
PSY225. In an ever-changing global society, the individual is both influenced by the groups they encounter and conversely they influence those same groups. Social Psychology addresses human interaction and its consequences. Topics include conformity, aggression, motivation, group organization, social influences on perception, cognitive processes, and culture’s impact on social behavior, addressing issues of tolerance within an increasingly diverse society. Emphasis is on the application of concepts. Prerequisite: PSY101 or SOC106 / 3 credits. Satisfies a Behavioral & Social Sciences general education requirement. Offered: Fall, Spring, Summer

Psychology of Aging
PSY231. This course presents a developmental perspective on the older adult. Biological, social, and psychological changes in personality and behaviors are studied with special attention to old age. Prerequisite: PSY101 / 3 credits. Offered: Varies

Developmental Psychology: The Life Span
PSY233. This course provides a survey of the physical, cognitive, sexual, social, and moral issues relevant to human development across the life span. Prerequisite: PSY101 and ENL101 / 3 credits. Satisfies a Behavioral & Social Sciences general education requirement. Offered: Fall, Spring, Summer

Brain and Behavior
PSY234. Brain and Behavior is all about the central nervous system (CNS)—its evolution, structures, development, and basic operating principles. Over the course of the semester students study the neural underpinnings (brain bases) of ordinary behaviors such as talking, moving, thinking, and dreaming. They also explore instances when the CNS “goes awry”; that is, examine the causes and behavioral effects of CNS disorders such as Alzheimer’s disease, schizophrenia, and autism. Prerequisite: PSY101 / 3 credits. Offered: Spring

Cognitive Psychology
PSY235. This course defines and explains the major concepts and principles underlying Cognitive Psychology. Topics include: Human Information Processing System, Perception and Attention, Short-Term Memory, different aspects of Long-Term Memory, Judgments, and Reasoning and Problem Solving. Prerequisite: PSY101 / 3 credits. Satisfies a Behavioral & Social Sciences general education requirement. Offered: Fall, Spring

Selected Topics in Psychology
PSY241. This course serves as a vehicle to either deepen students’ knowledge of subjects addressed in Psychology introductory courses or explore issues outside the traditional curriculum. Prerequisite: PSY101 / 3 credits; may be repeated once for credit. Satisfies a Behavioral & Social Sciences general education requirement. Offered: Spring

Recreation
Refer to Fitness.

Religion

Concepts of Western Religion
REL122. A study of the major concepts and beliefs, including Judaism, Christianity, and Islam from historical, philosophical, and cultural perspectives with consideration of the influence on personal and contemporary life. Prerequisite: None / 3 credits. Offered: Spring

Concepts of Eastern Religion
REL123. A study of the major concepts and beliefs including Hinduism, Buddhism, Confucianism and Taoism from historical, philosophical and cultural perspectives with consideration of the influence on personal and contemporary life. Prerequisite: None / 3 credits. Offered: Fall, Summer

Service Learning

Service Learning Option
SLR101. This course is a fourth-credit option which may be added as an additional "lab" to an existing course. Students conduct a minimum of 50 hours of community service. Students interested in this course must first enroll in and have the permission of the instructor of an anchor three or four credit course. This additional course requires a contract between the student and faculty member. All contracts are submitted to the College Service Learning coordinator for approval. Co-requisite: Enrollment in a college-level credit course and permission of both instructor and Service Learning coordinator / 1 credit; may be repeated for a maximum of 3 credits. Offered: Fall, Spring
Sociology

Principles of Sociology
SOC106. Introduction to basic social concepts, theoretical perspectives and research methods. Topics include societies, cultures, social organization, social inequalities, social institutions, group behavior and the impact of globalization, population growth, and new technologies upon individuals and societies. Prerequisite: ENL020 and ENL050 or satisfactory basic skills assessment score / 3 credits. Satisfies a Behavioral & Social Sciences general education requirement. Offered: Fall, Spring, Summer

Juvenile Delinquency
SOC205. This course analyzes delinquent behavior of young people in our society, using various studies of the topic. It emphasizes the relationship between delinquent behavior and today's social and political conditions. Prerequisite: SOC106 / 3 credits. Satisfies a Behavioral & Social Sciences general education requirement. Offered: Fall, Spring, Summer

Sociology of Education
SOC216. This course provides a sociological analysis of the structure and function of contemporary education. Although some comparative cultural/historical data will be used, the focus is on education in America today. Students explore theoretical approaches to the sociology of education, stratification of schools both externally (public/private, suburban/urban) and internally (tracking, socialization, and more), the culture of schools, the relationship between education and issues of class, ethnicity and gender, and the sociology of educational alternatives and reform. Prerequisite: SOC106 / 3 credits. Satisfies a Behavioral & Social Sciences general education requirement. Offered: Fall, Spring, Summer

Social Problems
SOC215. A survey of the nature and range of social problems, the global and societal conditions which give rise to them, and the methods by which societies attempt to cope with them. Prerequisite: SOC106 / 3 credits. Satisfies a Behavioral & Social Sciences general education requirement. Offered: Fall, Spring, Summer

Sociology of Health and Health Care
SOC220. This course examines the socio-cultural aspects of health, illness and health care. Topics include development of scientific medicine, social epidemiology; definition of health and illness; social and cultural dimensions of disease and the illness experience; ethical issues in health care and health care reform. Effects of social stratification on access to health care, health professionals; the politics and economics of health care for selected diseases, such as breast cancer and HIV, are explored. Prerequisite: SOC106 or PSY101 or (BIO101 or BIO151) or BIO105 / 3 credits. Offered: Fall, Spring, Summer

Sociology of Gender: Roles of Men and Women in Global Perspective
SOC235. Study of the changing social roles and experiences of men and women throughout the world. Family, educational, economic, political, community and cultural aspects of men and women’s lives are explored. Prerequisite: SOC106 or PSY101 / 3 credits. Offered: Fall, Spring

Domestic Violence and Victimology
SOC211. The major focus of this sociology course introduces students to research on domestic violence and victimology. Theories of domestic violence (the resource theory, symbolic interaction theory, functionalism, conflict theory, and criminological theories) are introduced, defined, and applied throughout the class. The macro-sociological view looks at violence as a societal-level. The micro-sociological view looks at the social interaction between perpetrators and victims. Data, research, and case studies are explored. Prerequisite: SOC106 / 3 credits. Offered: Fall

Social Science Research Methods
SOC225. This course introduces the basic research techniques and skills of the social sciences through an interdisciplinary, topical approach. Qualitative and quantitative research methods including ethnography, observation, survey and experimentation are discussed, demonstrated and practiced. Topics include formulating social science hypotheses, identifying variables, constructing and interpreting questionnaires, interviewing, and observing participants. Other topics include social scientists' use of statistics; research ethics; interpretation and communication of research findings, and the relevance of research to public policies in our society. Students may not earn credit for PSY216. Prerequisite: SOC106 and (MAT020 or MAT025) / 3 credits. Offered: Fall, Spring

Peoples and Cultures of Africa
SOC230. This course examines Africa's social, economic, political, religious and cultural institutions, as well as the origins, cultural practices, population dynamics, family structures, marriage, inheritances, values, ethnicity, gender relations and patriarchy, and inter-tribal and ethnic conflicts in modern Africa. Contemporary issues such as HIV/AIDS epidemic, poverty, and Africa's place in the global world are examined. Prerequisite: SOC106 or ANT107 or HIS119 or HIS120 / 3 credits. Satisfies a Behavioral or Social Science general education requirement. Offered: Fall

The Sociology of Gender
SOC232. The study of the sociological aspects of aging, the sociological adaptations to an aging population, and study of the aging individual in the social setting. Prerequisite: SOC106 or GRN100 / 3 credits. Offered: Varies

Selected Topics in Sociology
SOC241. This course serves as a vehicle to either deepen students' knowledge of subjects addressed in Sociology introductory courses or explore issues outside the traditional curriculum. Prerequisite: Any introductory Sociology or Anthropology course / 3 credits; may be repeated once for credit. Offered: Fall, Spring
Spanish

Conversational Spanish
SPN100. This basic conversational Spanish course is designed to introduce the non-native speaker of Spanish to the four basic skills necessary to develop a working knowledge of Spanish: understanding, speaking, reading, and writing. The emphasis is on speaking Spanish, understanding spoken Spanish. Prerequisite: ENL050 or satisfactory basic skills assessment score / 3 credits. Offered: Fall, Spring, Summer

Elementary Spanish I
SPN101. The first semester of a two-semester college elementary Spanish sequence for beginning non-native students of Spanish. The text and ancillary materials provide a thorough four skills approach: speaking, reading, writing, and understanding spoken Spanish. This course is not intended for students whose native language is Spanish. Prerequisite: ENL020 and ENL050 or satisfactory basic skills assessment score / 4 credits. Satisfies a Humanities & Fine Arts general education requirement. Offered: Fall

Elementary Spanish II
SPN102. This is the second semester of a two-semester college Elementary Spanish sequence. It is for beginning students of Spanish. The text and ancillary materials provide a thorough four skills approach: speaking, reading, writing, and understanding spoken Spanish. (5 class hours) Prerequisite: SPN101 / 4 credits. Satisfies a Humanities & Fine Arts general education requirement. Offered: Fall, Spring

Elementary Spanish I for Health Professionals
SPN105. This is a one semester college Elementary Spanish course with focused instruction in Spanish language, culture, and health issues of relevance to health professionals working with Spanish speaking populations. The text and ancillary materials provide development of the four skills: speaking, reading, writing, and understanding Spanish. Prerequisite: ENL020 and ENL050 or satisfactory basic skills assessment score / 4 credits. Satisfies a Humanities & Fine Arts general education requirement. Offered: Varies

Immersion Study in Spanish Language/Civilization
SPN123. Students study Spanish language and civilization in a Spanish speaking country. Traditional class work is supplemented by cultural activities and fieldtrips. Prerequisite: None / 3 credits. Offered: Varies

Travel and Study in a Spanish Speaking Country
SPN126. This is an educational field trip for Spanish language students enrolled at Cape Cod Community College. Visits could include Spain, Puerto Rico, Costa Rica, Ecuador, or any other Spanish speaking country. Co-requisite: any credit Spanish class at CCCC / one week to 10 days. 1 credit; may be repeated; 4 credit maximum. Offered: Spring

Onsite Spanish Culture
SPN128. A ten-day study tour in a Spanish speaking country. Visits could include Spain, Puerto Rico, Costa Rica, Ecuador, Cuba, etc. Prerequisite: One semester of college Spanish with a grade of C or better / 3 credits. Offered: Varies

Intermediate Spanish I
SPN201. This course is for students who have completed one year of elementary college Spanish or three to four years of high school Spanish. Students read, discuss, and write about Hispanic culture and language in Spanish. Prerequisite: SPN102 or 3-4 years of high school Spanish / 4 credits. Satisfies a Humanities & Fine Arts general education requirement. Offered: Fall

Intermediate Spanish II
SPN202. This is the second semester of the sequential intermediate college-level Spanish course emphasizing further mastery of speaking, understanding, reading and writing Spanish. Readings include historical and literary aspects of the Hispanic world and Spain. This course completes Stage III of the Language Learning Continuum of the ACTFL (American Council on Teaching Foreign Languages). (5 class hours) Prerequisite: SPN201 or 3-4 years of high school Spanish / 4 credits. Satisfies a Humanities & Fine Arts general education requirement. Offered: Spring

Advanced Spanish I
SPN301. This course is a survey of selected Spanish literary works. These selections serve as a basis for classroom discussion and writing assignments. Conversation and composition polish and develop students' abilities in all four language skills. Prerequisite: SPN202 / 3 credits. Offered: Fall

Advanced Spanish II
SPN302. This course is a survey of selected Spanish literary works. These selections serve as a basis for classroom discussion and writing assignments. Conversation and composition polish and develop students' abilities in all four language skills. Prerequisite: SPN301 / 3 credits. Offered: Spring

Travel and Dance

Oral Interpretation/Readers Theater
COM205. Refer to Communication.

Modern Dance I
DAN120. This course provides students with a fundamental knowledge of modern dance techniques and composition. Participation in dance exercises, observation, and discussion of various modern dance styles enables students to develop a physical awareness and understanding of modern dance. Emphasis is placed on participation. Prerequisite: ENL010 and ENL040 or satisfactory basic skills assessment scores / 3 credits; may be repeated once for credit. Satisfies a Humanities & Fine Arts general education requirement. Offered: Fall, Spring

Modern Dance II
DAN221. This course provides students with the opportunity to continue the study of Modern Dance technique and composition. Students participate in intermediate dance exercises and execute more advanced technique. Students observe and discuss dance styles which include interdisciplinary collaboration with music, art, and theater, and develop a further understanding and appreciation of modern dance performance. Prerequisite: DAN120 / 3 credits. Offered: Spring

African Dance and Drumming
DAN126. This course serves as an introduction to the study of African dance and drumming including techniques, history and composition of dance as well as drumming techniques and rhythmic styles. In class, all students participate in both dance and drumming. Students learn about Africa including Mali, Senegal, Guinea, and West Africa and how these cultures have influenced art forms throughout the world. (Students may earn credit for either DAN126 or MUS125.) Prerequisite: ENL010 and ENL040 or satisfactory basic skills assessment score / 3 credits; may be repeated once for credit. Offered: Spring

Middle Eastern Dance and Culture
DAN127. This course serves as an introduction to the study of North African (Egypt and the Maghreb) and Middle Eastern dance and culture, including history, composition, rhythms, finger cymbals, and styles of folkloric dance, drumming and costume. Students learn about the cultural and world influence of the arts of the Middle East and North Africa. Prerequisite: ENL010 and ENL040 or satisfactory basic skills assessment score / 3 credits; may be repeated once for credit. Offered: Fall
Introduction to Theater
THR101. This course explores the many facets that make up the experience of theater. Students probe questions like: what is the essence of theater, who are the artists that create what one sees on stage, what are the types of drama, the trends and movements since the Ancient Greeks, and how are plays reflective of playwrights’ cultures? Students broaden their knowledge and experience of what constitutes the art of theater through reading, class discussion, lecture, staged readings, and viewing live and video performances. Prerequisite: ENL010 and ENL040 or satisfactory basic skills assessment score / 3 credits. Satisfies a Humanities & Fine Arts general education requirement. Offered: Fall, Spring

Page to Stage: Planning Play Productions
THR102. Students consider the life cycle of a play from the page to the stage. Students read several plays, each to be explored from the viewpoint of the director, the various designers, and other collaborating artists. Prerequisite: None / 3 credits. Offered: Spring

Acting I
THR103. Students explore basic acting theory, characterization, script analysis, scene and monologue performance to build their confidence when performing before an audience. Prerequisite: ENL010 and ENL040 or satisfactory basic skills assessment score / 3 credits. Offered: Fall, Spring, Summer

Rehearsal and Performance
THR113. Rehearsal and Performance is a practicum course that invites students to participate in the multifaceted experience of interpreting a play into a live theater production. Students learn by doing, with the option of assuming responsibilities as performers and/or production crewmembers in the Department’s scheduled production. Prerequisite: None / 3 credits; may be repeated once for credit. Satisfies a Humanities & Fine Arts general education requirement. Offered: Fall, Spring

Introduction to Theater Design
THR117. Students use a practical, hands-on approach to designing and constructing various scenic elements for the stage including sets, costumes, props, and lighting. (2 class hours / 3 studio hours) Prerequisite: None; THR119 recommended / 3 credits. Offered: Spring (bi-annually)

Stagecraft
THR119. Students learn both theory and practice of technical theater with emphasis on the principles of planning, construction, rigging of scenery, hanging and circuiting of lighting instruments, and operation of sound systems. (6 contact hours) Prerequisite: ENL010 and ENL040 or satisfactory basic skills assessment score / 3 credits; may be repeated once for credit. Offered: Fall, Spring

Stage Movement
THR125. This course is designed to introduce the non-dancer to the fundamentals of movement and expression through observation, analysis, interpretation, and demonstration. Students learn postural alignment, centering, breathing techniques and kinesthetic (body) awareness. Individual and group exercises are used to explore various practices such as mime, mask, stage combat, and more. Prerequisite: None / 3 credits. Offered: Fall

Acting II
THR203. This course builds on skills developed in a beginning acting class to include more advanced work in character development. Students are introduced to advanced level work on text analysis, character motivation and physical acting. Prerequisite: THR103 / 3 credits. Offered: Spring

Directing for Theater
THR205. This studio course combines the introduction of basic directing theory and the application of technique to assigned scenes. Students are expected to have some previous theater experience on stage or behind the scenes. Students learn to interpret scripts for performance, prepare for auditions, manage rehearsals, and refine actors work for public presentation. Prerequisite: THR103 / 3 credits. Offered: Varies

Acting on Camera I
THR207. This course is for the intermediate actor to learn the specific acting and career management skills required to pursue professional work in film and television. Students develop refined audition techniques for soap operas and all forms of television commercials. Students learn about the business concepts and self-marketing tools used by performers in film and television, focusing on how actors fit into this marketplace and how to enhance their own unique talents as saleable qualities. Prerequisite: THR103/ 3 credits. Offered: Fall

Acting on Camera II
THR208. This course is a continuation of Acting On Camera I with students working in greater depth on scripts and developing more skill and confidence in front of the camera. Topics include script analysis, preparing for emotional scenes, non-verbal reactions, characterization as well as further discussion in regard to the job seeking process. While some scripted material is provided by the instructor, students are required to go to Internet script sites and select material from existing television shows or films. Prerequisite: THR207 / 3 credits.