Chapter 6

Course Descriptions

Course Numbering Information
0001–0999 Developmental courses intended for students who need further preparation before enrolling in college-level courses. These courses award Equivalent Hours (EHs) rather than academic credit hours and do not satisfy degree or certificate requirements.

1000–2999 College-level courses offered for credit and applicable to the Associate of Arts, Associate of Science, Associate of Science in Engineering, Associate of Applied Science and Associate of Arts in Teaching degrees, as well as all certificate programs.

Prerequisites
Many courses require prior satisfactory completion of another course to equip students with the knowledge and skills needed to succeed in the course. For example, English (EGL) 1020 Composition II, cannot be taken unless EGL-1010 (the prerequisite) has been satisfactorily completed. In addition, for a number of introductory-level credit courses, a minimum level of proficiency in reading, writing and mathematics, as determined by the college's placement tests, is required as a prerequisite. In such cases, satisfactory completion of the appropriate developmental studies course (see ESL, DVE, DVM and DVR listings) will satisfy the prerequisite as well. Students should be certain to check for prerequisites in the course listings that follow. Except when specifically authorized by the department chairperson or dean, registration will not be permitted if prerequisites have not been fully satisfied.

Course Contact Hours
At the end of some course descriptions is a phrase such as "3 studio hours" or "3 class/2 lab hours." This indicates the actual time a student should expect to spend per week in a course, broken down by the type of contact—classroom/lecture, laboratory, studio or clinical. If there is no such indicator for a course, students may assume there will be one class hour per week for each credit awarded for completion of the course. (Courses which meet in an accelerated or nontraditional format rather than in the usual full-semester, 15-week format will meet more than the hours indicated per week in order to reach the same number of total contact hours for the semester.)

Accounting (ACC)

Business Studies Department
Bladen Hall, Room 210
301-322-0713

ACC-1000 Fundamentals of Accounting. 3 Credits
Preparation for ACC-1010 for students lacking background in accounting. Enroll in ACC-1000 directly or transfer from ACC-1010 during the first five weeks of a semester.

Note: Does not satisfy program concentration requirement in business-related curricula; may not be taken for credit if credit has previously been received for ACC-1010 or higher.

ACC-1010 Principles of Accounting I. 4 Credits
University-parallel introductory accounting sequence. Covers major accounting theories, principles and applications. Regular classroom and online formats available. Students should have had previous accounting or have completed ACC-1000 or ACC-1030. Prerequisites: Math (DVM-0071 or appropriate test score) and Reading proficiency or ACC-1000 or ACC-1030 with C or higher.

ACC-1020 Principles of Accounting II. 4 Credits
Second semester of sequence. Continues focus on accounting theories, principles and applications. Regular classroom and online formats available. Prerequisite: ACC-1010. (Honors version available, spring only.)

ACC-1030 Accounting for Managers. 3 Credits
Focuses on sources of accounting information and the meaning of financial reports as an aid to decision-making. This course adopts a user's approach and does not emphasize the technical aspects of record maintenance. Prerequisite: Reading proficiency.
ACC-1040 Microcomputer Applications in Accounting. 3 Credits
A hands-on course in the use of microcomputers to process accounting data. Knowledge of programming is not necessary. Projects emphasize accounting applications. Prerequisite: ACC-1000 or ACC-1010.

ACC-1050 Payroll Accounting. 1 Credit
Covers payroll preparation, payroll rules, recordkeeping and payroll tax reporting. Prerequisite: Reading proficiency.

ACC-1070 QuickBooks I. 1 Credit
Students will learn to establish a chart of accounts, vendor, customer and payroll records, entering typical transactions and preparing standard financial reports for service firms using QuickBooks software. Prerequisites: ACC-1000 or ACC-1010 or ACC-1030.

ACC-1080 Introduction to Spreadsheet Accounting. 1 Credit
Basic spreadsheet applications in accounting. Use of spreadsheets for recordkeeping, computation, analysis and presentation of accounting data is covered. Prerequisites: Reading proficiency, ACC-1010 or ACC-1030 and INT-1010.

ACC-1090 QuickBooks II. 1 Credit
Students will learn to establish a chart of accounts, vendor, customer and inventory records, entering typical transactions and preparing standard financial reports for merchandising firms using QuickBooks software. Prerequisites: ACC-1000 or ACC-1010 or ACC-1030.

ACC-1100 QuickBooks III. 1 Credit
Students will learn budgeting, job costing and nonprofit accounting using QuickBooks software. Prerequisites: ACC-1070 or ACC-1090.

ACC-2010 Intermediate Accounting I. 3 Credits
Intermediate-level accounting covering cash, investments, receivables, inventories, plant assets and measurement of financial income in accordance with accounting principles (GAAP). Prerequisite: ACC-1020 with C or higher. (Classroom sections offered fall semester only. Online sections offered spring semester only.)

ACC-2020 Intermediate Accounting II. 3 Credits
Accounting principles applied to corporations, including stockholders’ equity and liability sections of the balance sheet. Prerequisite: ACC-2010 with C or higher. Capstone Course: In addition to completing the prerequisite course, students must complete a minimum of 47 credits prior to enrolling in this course. A minimum cumulative GPA of 2.00 or better is also required. (Classroom sections offered spring semester only. Online sections offered fall semester only.)

ACC-2030 Cost Accounting. 3 Credits
Basic concepts of cost accounting functions within a manufacturing organization, including measurement of material costs, labor costs, manufacturing overhead and marketing costs. Prerequisite: ACC-1020. (Classroom sections offered fall semester only. Online sections offered all semesters.)

ACC-2040 Principles of Auditing. 3 Credits
Analysis of audit functions and responsibilities. Emphasis on examining accounting records and drawing valid audit conclusions. Prerequisites: ACC-2020; MAT-1140 completed or concurrent.

ACC-2070 Governmental and Nonprofit Accounting. 3 Credits
Accounting applied to local, state and federal agencies or schools, hospitals and other nonprofit organizations. Covers general, special revenue, enterprise and fiduciary funds and cash planning and control. Prerequisite: ACC-1020. (Offered fall semester only.)

ACC-2080 Spreadsheet Accounting. 3 Credits
Applies spreadsheet skills to financial and managerial accounting applications, analysis and problem solving. Prerequisites: ACC-1020 and INT-1010 (formerly CIS-1010). 3 class hours with open lab.

ACC-2120 Accounting Information Systems. 3 Credits
This course examines accounting information systems, both manual and computerized. The course includes information on current technologies in information systems including hardware, software, networks, databases and data communications. Internal controls and security issues are examined. Prerequisite: ACC-1020.

ACC-2210 Federal Income Tax. 3 Credits
Study of the federal tax system includes survey of tax legislation, court rulings and their application to individuals. Prerequisite: ACC-1010.

ACC-2220 Advanced Tax Accounting. 3 Credits
A second course in taxation, which examines the tax consequences of operating a business. The course emphasizes the federal income tax treatment of corporations and partnerships with some coverage of estates and trusts. Prerequisites: ACC-1020 and ACC-2210.

ACC-2230 Individual Income Tax Preparation (VITA). 3 Credits
Students will learn to prepare basic and intermediate income tax returns for both Federal and local taxes. Successful students will obtain IRS volunteer tax preparer certification and will participate as tax preparers at the Prince George’s Community College Volunteer Income Tax Assistance (VITA) Site during the spring tax season. This service learning course begins during the January Intersession and continues through the close of tax season. Prerequisite: Reading proficiency.

ACC-2250 Business Finance. 3 Credits
Capital markets and the banking system, including financial analysis and planning, working-capital management, capital budgeting and long-term financing. Prerequisite: ACC-1020 and MAT-1120.

ACC-2890H Honors Colloquium in Accounting. 3 Credits
This honors colloquium will examine special topics in the field of accounting and its relevance across disciplinary perspectives. The issues to be addressed in each colloquium will vary from semester to semester. These courses are designed for students in the Honors program, but are open to others with the approval of the honors coordinator or the instructor. Prerequisites: Reading proficiency and permission of instructor or honors coordinator.

ACC-2910–2930 Cooperative Education. 1-3 Credits
African-American Studies (AFA)

History, Political Science, Geography and Anthropology Department
Marlboro Hall, Room 3078
301-322-0561

AFA-1010 Introduction to African-American Studies. 3 Credits
An introduction to the interdisciplinary study of the life and culture of persons of African heritage in the United States. Explores the cultural and historic ties to various African peoples and the multicultural context. Prerequisite: Reading proficiency.

AFA-2010 Introduction to the African and Black Diaspora. 3 Credits
A comparative analysis of African and black communities around the globe, with emphasis on the United States South, the Caribbean, Central and South America. Attention will be given to the awakening sense of political interrelatedness that undergirds contemporary Pan-African movements, collaborative struggle against oppression and the renewal of traditional African culture and values in Diaspora. Prerequisite: Reading proficiency. (Offered fall semester only)

AFA-2890H Honors Colloquium in African-American Studies. 3 Credits
This honors colloquium will examine special topics in the field of African-American Studies and their relevance across disciplinary perspectives. The issues to be addressed in each colloquium will vary from semester to semester. These courses are designed for students in the Honors program, but are open to others with the approval of the Honors Coordinator or the instructor. Prerequisites: Reading proficiency and permission of the instructor or honors coordinator.

Anthropology (ANT)

History, Political Science, Geography and Anthropology Department
Marlboro Hall, Room 2054
301-322-0525

ANT-1010 Introductory Physical Anthropology. 3 Credits  SS
Humans' place in nature, including genetics, evolutionary theory, primate behavior, human physical variations and culture. Prerequisite: Reading proficiency.

ANT-1030 Introductory Cultural Anthropology. 3 Credits  SS
Anthropological approaches to culture, language and social organization, including religious belief, gender role, family form and economic life. Prerequisite: Reading proficiency. (Honors version available.)

ANT-2010 Introduction to Archaeology. 3 Credits
Survey of archaeology, including its development in America and an overview of archaeological methodologies. Prerequisite: Reading proficiency.

ANT-2030 Language and Culture. 3 Credits
Theories of language dealing with learning, diversity, creativity and change. Relation of language to perception, ethnic identity, occupation and social class. Prerequisite: One of the following courses: ANT-1010, ANT-1030, PSY-1010, SOC-1010, SPH-1010 or SPH-1090.

ANT-2050 Peoples and Cultures. 3 Credits
Cultures of a major world region. The region studied varies and may include one of the following: Sub-Saharan Africa, India, Circum-Mediterranean, Middle East, Far East and the Americas. Prerequisite: One of the following courses—ANT-1010, ANT-1030, ANT-2030, HST-2470 or SOC-1010.

ANT-2130 Magic, Witchcraft and Religion: An Anthropological Interpretation. 3 Credits
A survey of religion and related phenomena in a variety of societies around the world. Considers the relationship of religion to other aspects of culture. Prerequisite: ANT-1030, PSY-1010 or SOC-1010. (Offered fall semester only)

ANT-2890H Honors Colloquium in Anthropology. 3 Credits
This honors colloquium will examine special topics in the field of anthropology and its relevance across disciplinary perspectives. The issues to be addressed in each Colloquium will vary from semester to semester. These courses are designed for students in the Honors program, but are open to others with the approval of the Honors Coordinator or the instructor. Prerequisites: Reading proficiency and permission of the instructor or honors coordinator.

Arabic (ARB)

Language Studies Department
Bladen Hall, Room 309
301-322-0946

ARB-1000 Arabic for Beginners. 3 Credits  H
Designed for students who are true beginners without any background knowledge of the Arabic language. The course focuses on the four skills of listening, speaking, reading and writing. 3 class/1 lab hour or equivalent.

ARB-1010 Elementary Arabic. 3 Credits  H
Continues to focus on the four skills of listening, speaking, reading and writing. Students will be studying Modern Standard Arabic, which is close to classical Arabic. (It is the language used for reading and writing Arabic today.) Students will advance their knowledge of grammar, pronunciation, vocabulary and reading and writing of Arabic. 3 class/1 lab hour or equivalent. Prerequisite: ARB-1000 or permission of the instructor.
ART-1010 Introduction to Art. 3 Credits  
Introduces students to the visual arts. Through lecture, demonstration and hands-on activities, students develop an appreciation for art and an understanding of the elements and principles of design, artistic styles, specific art techniques, and major historical movements in art. Artistic ability or experience is not required. Prerequisite: Reading proficiency. (Honors version available.)

ART-1510 Basic Design. 3 Credits  
This course introduces the organization of visual elements on a two dimensional plane. The elements of art and principles of design are examined through lectures, demonstrations and related studio problems for students to explore and solve. Students will develop techniques for handling a variety of art materials. 6 studio hours.

ART-1530 Drawing I. 3 Credits  
Introduction to basic drawing techniques through the exploration of the human figure and natural and man-made forms. A variety of drawing tools and materials are introduced. 6 studio hours.

ART-1540 Painting I. 3 Credits  
An introduction to basic techniques and theories of painting. Emphasis is on learning the skill of painting and application of materials. Students explore the basic elements of two-dimensional art as a means to create interesting compositions, manipulate space and develop solid forms. The course is designed for beginners with little or no experience in painting. Proficiency in drawing is beneficial but not critical to successful completion of this course. 6 studio hours.

ART-1550 Sculpture I. 3 Credits  
Introduction to basic sculptural techniques. Elements and principles of 3-D art are emphasized through practice in bronze casting, welding, carving and fabrication. Development of ideas will be encouraged through critique of and historic references to specific sculptures and artists. 6 studio hours.

ART-1560 Photography I. 3 Credits  
Contemporary principles and terminologies are introduced by developing basic skills with camera operation and handling, photographing, black and white film processing, black and white darkroom techniques and print finishing and presentation. The students are exposed to a brief history, color theory and the aesthetics of the photographic vision. No prior experience required. 6 studio hours.

ART-1570 Introduction to Computer Graphics. 3 Credits  
Designed to provide a survey of the role of the computer in visual communication design. Students will receive basic training on the primary types of software and peripherals with which designers must be familiar. This includes painting-type (raster) software as well as structured graphics (vector) applications. Students will be encouraged to develop creative approaches to projects coupled with increased technical proficiency. 6 studio hours.

ART-1580 Portfolio Development for Visual Art. 1 Credit  
A studio course which provides a structured approach to portfolio development. It will enable students to assemble a coherent body of artwork for academic transfer or employment opportunities. Students will prepare a portfolio in their area of specialization in a variety of formats. Prerequisites: ART-1510, ART-1530, completion of a 2000-level studio art course and a second 2000-level studio course completed or concurrent. Culminating experience course: In addition to completing prerequisite courses, students must also have completed a minimum of 46 credits before enrolling in this course. A minimum cumulative GPA of 2.00 or better is also required. 3 studio hours.

ART-1590 Watercolor I. 3 Credits  
An introductory course in basic watercolor painting. Emphasis is on techniques and traditional watercolor materials used by today's watercolorists. Includes composition, color concepts and history of watercolor painting. Students will attend lecture and demonstration classes and create their own paintings. 6 studio hours.

ART-1600 Ceramics I. 3 Credits  
A beginner's studio course designed to teach ceramics as a creative craft and art form. The student is encouraged to explore ceramics as a form of three-dimensional expression and to be actively engaged in the complex cycle of ceramic production; production of clay, construction of forms, decoration and firing. Students are expected to acquire knowledge of and to test various glazes. 6 studio hours.

ART-1610 Graphic Design I. 3 Credits  
Provides a survey of the design principles and artistic concepts that produce quality commercial art. Students will acquire hands-on experience in taking a variety of projects from concept development to final output. Training will be provided in the various production skills and techniques used by graphic design professionals. Prerequisite: ART-1510 and ART-1570, 6 studio hours.

ART-1620 Digital Publication Design. 3 Credits  
Designed to acquaint the student with the fundamentals of publication and print media design. Hands-on training will be provided using a variety of digital media and hardware current to the graphic design profession. Students will gain experience in taking a print media project from concept to page layout and production. Prerequisite: ART-1570, 6 studio hours.

ART-1630 Commercial Illustration I. 3 Credits  
Investigates the various media, techniques and artistic concepts that produce quality commercial illustration. Prerequisite: ART-1530. 6 studio hours.

ART-1640 Color Theory and Application. 3 Credits  
Introduces students to the history, psychology and physics of color by building on concepts introduced in ART-1510, Basic Design. In all disciplines, a working knowledge of color principles is vital in creating effective, successful works of art. Through lectures, studio projects and museum visits, students will develop a vocabulary of color and a working understanding of various color systems. In the studio, students will create original artworks that explore aesthetic color relationships and the psychological application of color. Through class critiques and written assignments, students will learn how to evaluate and discuss their own work as well as the work of their peers. Prerequisite: ART-1510. 6 studio hours.
ART-2510 Design II. 3 Credits
A continuation of ART-1510, Basic Design. The visual elements and principles of three-dimensional design will be explored with an emphasis on visual and critical thinking. Students will be introduced to materials and methods for developing a work of art in three-dimensional space and will learn how to apply the principles of design to work that has multiple points of view. Students also will learn how to consider aesthetic and conceptual issues as well as solve technical problems in the creation of original art work. Through class critiques, students will gain experience in written and verbal analysis of their own work and the work of their peers. Prerequisite: ART-1510. 6 studio hours.

ART-2530 Drawing II. 3 Credits
An advanced studio course that emphasizes further development of individual drawing skills, a thorough understanding of drawing principles and a greater exploration of the various drawing materials and techniques. The human figure, landscape and man-made objects are the source of investigation. Prerequisite: ART-1540. 6 studio hours.

ART-2540 Painting II. 3 Credits
An advanced studio course that stresses further development of individual painting skills and techniques and a broader understanding of color theory. Students are encouraged to explore complex issues and to develop greater understanding of the medium. Prerequisite: ART-1550. 6 studio hours.

ART-2550 Sculpture II. 3 Credits
This course is an introduction to the principles of sculptural practice and design. Emphasis is placed on independent selection of materials and their aesthetic implications and how they relate to contemporary sculptural images. Prerequisite: ART-1560. 6 studio hours.

ART-2560 Photography II. 3 Credits
Continues the exploration of the photographic vision. Under the supervision of the instructor, the student defines and completes a personal project by using advanced camera handling and lighting techniques, darkroom manipulation and altered processes including electronic scanning and printing. Prerequisite: ART-1570. 6 studio hours.

ART-2570 Lettering, Typography and Layout. 3 Credits
Designed to deepen the student’s understanding of fundamental publication and presentation design. The overall goal of the course is to expand the student’s ability to explore creative solutions for text based visual information. Prerequisite: ART-1580. 6 studio hours.

ART-2580 Digital Photography I. 3 Credits
This course is an introduction to the terms and technologies employed in digital photography. Students will utilize digital cameras, scan film and photographs, manipulate images and produce finished prints with laser and inkjet printers. Students must have access to a 35mm or digital camera for use in this course. 6 studio hours.

ART-2590 Watercolor II. 3 Credits
This advanced course will cover watercolor techniques in depth. Students work with more refined techniques of the medium: large paper format and watercolor monoprints and a more independent approach to their own work. Prerequisite: ART-1590. 6 studio hours.

ART-2600 Ceramics II. 3 Credits
Emphasis on designing forms in clay using hand-building and wheel-throwing techniques. Advanced glaze theory, clay bodies and firing techniques explored in depth. Prerequisite: ART-1600. 6 studio hours.

ART-2610 Graphic Design II. 3 Credits
Designed to provide students with advanced concepts utilized in the creation of advertising art, Web-based graphics, broadcast graphics, interactive multimedia, electronic publishing and print media. This course attempts to expand the survey of design principles and artistic concepts to a more global perspective. Prerequisite: ART-1610. 6 studio hours.

ART-2620 Digital Illustration. 3 Credits
Provides a survey of computer-based methods of producing artwork used commercially. This includes extensive use of object-oriented and image processing software packages. Projects may include package design, editorial support illustration, logo/icon design, creative Web pages, statistical charts and graphs and technical illustration. Prerequisite: ART-1570. 6 studio hours.

ART-2630 Commercial Illustration II. 3 Credits
Designed to expand a student's exploration of illustration techniques. Emphasis is on the creative approach to preparing imaginative, effective illustrations. Prerequisite: ART-1630. 6 studio hours.

ART-2640 Computer Painting. 3 Credits
In-depth use and investigation of bit-mapped graphics (paint) programs. Prerequisite: ART-1570. 6 studio hours.

ART-2650 Animation and Multimedia I. 3 Credits
Focuses on two-dimensional animation and multimedia, with an emphasis on creativity, originality and experimentation. Various software packages will be utilized to create animated sequences complete with sound and special effects. Prerequisite: ART-1570. Students also will be expected to have an aptitude for learning a variety of software packages. 6 studio hours.

ART-2660 Digital Imaging. 3 Credits
Advanced techniques in computer graphics creation and image manipulation. Includes use of scanners, digital cameras and CD-ROM sources. Prerequisite: ART-1570. 6 studio hours.

ART-2670 3-D Digital Modeling and Animation. 3 Credits
Focus is on three-dimensional modeling and animation techniques, with an emphasis on creativity, originality and experimentation. Various software packages will be used to create 3-D stills and animated sequences complete with sound and special effects. A survey of modeling techniques and examples from a variety of industries will be provided. Prerequisite: ART-1570. Students also will be expected to have an aptitude for learning a variety of software packages. 6 studio hours.

ART-2680 Computer Painting. 3 Credits
In-depth use and investigation of bit-mapped graphics (paint) programs. Prerequisite: ART-1570. 6 studio hours.

ART-2690 Animation and Multimedia II. 3 Credits
Focuses on three-dimensional animation and multimedia, with an emphasis on creativity, originality and experimentation. Various software packages will be utilized to create animated sequences complete with sound and special effects. Prerequisite: ART-1570. Students also will be expected to have an aptitude for learning a variety of software packages. 6 studio hours.

ART-2700 Art Survey I. 3 Credits
A survey of art and architecture from prehistoric times through Gothic art. Works of painting, sculpture and architecture are analyzed both in terms of their style, iconography and technique and in terms of their significance within the historical, social, religious and economic context in which they were produced. Prerequisite: Reading proficiency.
ART-2710 Art Survey II. 3 Credits
Survey of art and architecture from the Renaissance to the 20th century. Works of painting, sculpture and architecture are analyzed both in terms of their style, iconography and technique and in terms of their significance within the historical, social, religious and economic context in which they were produced. Prerequisite: Reading proficiency.

ART-2720 African-American Art. 3 Credits
Beginning with the West and Central African cultures, this course traces the artistic exploration and achievements of African-American artists from the seventeenth-century artisans through the prolific period of the Harlem Renaissance to post modern and contemporary fine arts. The course examines the historical, economic, social, and cultural trends that have influenced African-American art. Students investigate the African-American artists’ visual voice through the historical Black experience that propels it. The assignments within the course advance the development of college-level reading, writing, and critical thinking skills through the examination and interpretation of the crafts and fine arts presented throughout the course. Prerequisite: Reading proficiency.

ART-2730 Integrated Arts. 3 Credits
Introduces students to the areas of visual arts, dance, music, theater and film through an exploration of representative works in these disciplines. The student will experience a variety of artistic performances and exhibitions that will enhance self-expression and develop a better understanding of the human experience. The assignments within the course advance the development of college-level reading, writing, and critical thinking skills through the integration, analysis, and appreciation of the arts. The course meets part of the Maryland State integrative arts requirement for the Associate of Arts in Teaching degree. Prerequisite: Reading proficiency.

ART-2740 Contemporary Art. 3 Credits
Introduction to art and architecture from the late 19th century to the present. Visual arts from traditional works to conceptual forms, installation, video and performance art are analyzed both in terms of style, technique and philosophy and their political, social and economic significance. The history and philosophy of the various movements and their relationship to contemporary thought and culture will be explored. Prerequisites: Reading proficiency.

ART-2750 Animation and Multimedia II. 3 Credits
A continuation of ART-2650. Student will explore advanced vector drawing, computer animation techniques, Web interface design, interactivity and digital and video/audio production. Course exercises will include 2-D animations, screen-based graphics and digital video presentations. Prerequisite: ART-2650. 6 studio hours.

ART-2780 Digital Photography II. 3 Credits
This course is a continuation of ART-2580, Digital Photography I. Students will explore complex techniques and contemporary concerns associated with advanced electronic imaging. The students will utilize digital cameras; film and flatbed scanners to digitize negatives, slides and photographs; manipulate images; and produce finished prints with laser and inkjet printers. Students must have access to a 35mm or digital camera for use in the course. Prerequisite: ART-2580.

ART-2890H Honors Colloquium in Art. 3 Credits
This honors colloquium will examine special topics in the field of art and their relevance across disciplinary perspectives. The issues to be addressed in each colloquium will vary from semester to semester. These courses are designed for students in the Honors program, but are open to others with the approval of the honors coordinator or the instructor. Prerequisites: Reading proficiency and permission of instructor or honors coordinator.

ART-2910-2930 Cooperative Education. 1–3 Credits

Biology (BIO)

BIO-1010 General Biology. 4 Credits
An introduction to biology for non-science majors with both lecture and laboratory components. Surveys ecology, chemistry of life, cell physiology, human organ systems, genetics, and molecular genetics. The ability to think critically and to draw conclusions based on evidence will be emphasized. Credit may not be earned for both BIO-1010 and BIO-1030 or BIO-1140 toward the same degree. Prerequisite: Reading proficiency. 3 class/3 lab hours. (Honors version available.)

BIO-1020 General Plant Biology. 4 Credits
University-parallel introductory plant biology course. Topics covered will include but are not limited to plant classification, structure, function and growth and development. Practical application of plant use in our daily life also will be presented. Prerequisite: Reading proficiency. 3 class/3 lab hours.

BIO-1080 Reproduction Biology. 4 Credits
An examination of biological principles and contemporary issues in reproductive biology. Demonstration of critical thinking, reasoning and writing skills is expected. Prerequisite: Reading proficiency. 3 class/3 lab hours.

BIO-1100 Forensic Biology. 4 Credits
An introduction to the principles and concepts of the biological aspects of forensic science. An examination of the role of the laboratory in criminal investigation and human identification using forensic pathology, serology, anthropology, molecular biology and other specializations. Prerequisite: Reading proficiency.

BIO-1110 Environmental Biology. 3 Credits
Survey of basic scientific principles needed to understand current environmental problems and evaluate alternatives for solving those problems. Prerequisite: Reading proficiency.

Note: Periodically, linked sections of BIO-1110 and BIO-1120 are offered, featuring local field trips and in the travel study format, featuring a trip to Florida or the Rocky Mountains. Any student who registers for a linked section of BIO-1110 also must register for the corresponding BIO-1120 section.

BIO-1120 Environmental Biology Laboratory. 1 Credit
Supplements BIO-1110, providing laboratory and field experiences relevant to environmental issues. Prerequisite: BIO-1110 completed or concurrent. 3 lab hours.
BIO-1130 Principles of Biology: Evolution, Ecology and Behavior. 4 Credits Sc
Evolution, ecology and behavior, including Mendelian genetics, population genetics, natural selection, coevolutionary relationships, ethology and contemporary issues. Students may receive credit for only one of the following BIO-1130, BIO-1010. Prerequisite: Reading proficiency and completion of DVM-0071 or equivalent score on math placement test. 3 class/3 lab hours.

BIO-1140 Principles of Biology: Cellular and Molecular Biology. 4 Credits Sc
University-parallel biology sequence for science/health majors. Cellular and biochemical emphasis, including cell anatomy and physiology, energy processes and the molecular biology of gene expression. Students may not receive credit for both BIO-1010 and BIO-1140 toward the same degree.) Prerequisite: CHM-1010. (Honors version available). 3 class/3 lab hours.

BIO-1210 Sustainability in Healthcare. 4 Credits
A survey course in sustainability in the healthcare environment including communication, leadership, environmental sustainability, systems and processes and organizational knowledge. Of particular relevance to those interested in Environmental Services, Building Services, Waste Management, Hospital Facilities, or Dietary Services. Prerequisite: Instructor permission.

BIO-1250 Biology of Aging. 3 Credits
Lecture/seminar course designed for major or non-major students. Examines the aging process on the molecular, cellular and organismic levels. Emphasizes alterations during the aging process in cells. Examination of various pathological disorders in relationship to aging is also emphasized. Students are required to read original articles and be prepared to discuss current topics in workshop settings. Prerequisites: Reading and English proficiency.

BIO-1290 Biology for Senior Citizens. 3 Credits
Review of biology with application to the aging process, including laboratory exercises designed to promote health awareness and longevity. Prerequisite: Reading proficiency. (Offered spring only.)

BIO-2010 Microbiology. 4 Credits
Structure and function of microorganisms and their role in pathology. Laboratory includes culture methods, staining and identification of bacteria. Prerequisite: BIO-1010 or BIO-1140 or BIO-2050. DVM 0071 completed or appropriate score on math placement test. 2 class/4 lab/1 recitation hours.

BIO-2030 Genetics. 4 Credits
Genetics and heredity. Analysis of classical and molecular genetics, emphasizing contemporary issues. Prerequisite: BIO-1140. 3 class/2 recitation hours. (Offered spring only.)

BIO-2050 Human Anatomy and Physiology I. 4 Credits Sc
University-parallel sequence. Structure and function of human body systems with emphasis on cells, tissues, transport mechanisms and skeletal, muscular and nervous systems. Prerequisites: BIO-1010 or BIO-1140. DVM-0071 completed or appropriate score on math placement test. 3 class/3 lab/1 recitation hours.

BIO-2060 Human Anatomy and Physiology II. 4 Credits Sc
Continuation of Human Anatomy and Physiology sequence. Structure and function of circulatory, lymphatic/immune, respiratory, digestive, urinary, reproductive and endocrine systems. Laboratory includes vertebrate dissection. Prerequisite: BIO-2050. 3 class/1 recitation/3 lab hours.

BIO-2090 Cell Biology. 4 Credits
An examination of the structure and function of cells with particular emphasis on metabolism, reproduction and the molecular aspects of cell communication and regulation. Credit may not be received for both FOS-2090 and BIO-2090. Prerequisites: BIO-1140 and CHM-1010. 3 class/3 lab hours.

BIO-2100 Marine Biology. 4 Credits
An introduction to marine ecosystems. Principles and processes common to all forms of life in the sea. Includes field trips to marine habitats, such as the Chesapeake Bay and Atlantic beaches and to local exhibits at the National Zoo and the National Aquarium in Baltimore. Prerequisite: BIO-1010 or equivalent.

Note: This course also may be offered in the travel study format, featuring a trip to a tropical marine location, such as Florida, Mexico, Jamaica or Belize.

BIO-2250 Introduction to Biotechnology. 4 Credits
Introduction to the basic principles and techniques of the science of biotechnology and the ways in which these are applied to agriculture, forensic science, medicine and microbiology. Course will examine current knowledge concerning nucleic acids and their role in the functions of living cells and viruses and how the manipulation of genetic material can be utilized in industries ranging from medicine to ecology. Laboratory includes principles of genetic manipulation, bacterial culture techniques, DNA restriction analysis, recombination and transformation of DNA, immunological detection of disease, the polymerase chain reaction (PCR) and randomly amplified polymorphism detection (RAPD). Prerequisite: BIO-1140. 2 class/4 lab/1 recitation hours.

BIO-2300 Introduction to Environmental Health. 3 Credits
An introduction to how humans affect and are affected by the quality of water, air, soil, and food resources. Provides an overview of pollution issues that impact human health; emphasizes types and sources of pollutants and their consequences with respect to human health. Also explores the impact of the growing human population on environmental quality and on health issues. Prerequisites: BIO 1130, BIO-1140, and MAT-0104 (formerly MAT 1040) with grades of C or better.

BIO-2330 Fundamentals of Soil Science. 4 Credits
A lecture/laboratory course introducing the study and management of soils as ecosystem components and media for the growth of plants and other organisms. Includes soil morphology, composition, formation, and conservation; emphasizes the physical, chemical, and biological properties of soils as they relate to plant biology, nutrient cycles, the hydrologic cycle, engineering uses of soils, and environmental quality issues. Prerequisites: BIO-1130, BIO-1140, CHM-1010 and MAT-0104 with grades of C or better. 3 lecture/3 lab hours per week.

BIO-2500 Biological Principles of Forensic Science. 4 Credits
An introduction to the principles governing the application of biology and biological statistics that are used to analyze evidence from crime scenes. Topics will include evidence examination and preserva-
BIO-2500 continues from previous page

...tion; presumptive and confirmatory biological testing; blood, urine, semen, hair and fiber comparisons; generation and statistical analysis of mitochondrial and nuclear DNA profiles; understanding the modern forensic crime laboratory; the role of the forensic scientist within the Criminal and Civil United States Court system. Prerequisites: BIO-1140 and CHM-1010. 3 class/3 lab hours.

BIO-2890H Honors Colloquium in Biology. 3 Credits
This honors colloquium will examine special topics in the field of biology and their relevance across disciplinary perspectives. The issues to be addressed in each colloquium will vary from semester to semester. These courses are designed for students in the Honors program, but are open to others with the approval of the honors coordinator or the instructor. Prerequisites: Reading proficiency and permission of the instructor or honors coordinator.

BIO-2910–2930 Cooperative Education. 1–3 Credits

BIO-2990H Honors Seminar in Engineering and Science (Special Topics). 1 Credit
Seminar course that introduces and studies emerging issues in science, engineering, technology, and mathematics. Topics vary by semester. Also offered as CHM-2990H and EGR-2990H. Prerequisites: A 3.00 GPA, completion of a minimum of 18 credits in courses offered by the division of Science, Technology, Engineering and Mathematics, and permission of the instructor or the honors program coordinator.

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Business Law (BUS)

Public Safety and Law Department
Bladen Hall, Room 208
301-322-0553

BUS-1220 Business Law I. 3 Credits
Basic theory and applications of business law; covers contracts, agency and property. Prerequisite: Reading proficiency.

BUS-1240 Business Law II. 3 Credits
Second semester of sequence. Covers partnership law, corporations, sales and commercial paper. Prerequisite: BUS-1220.

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Business Management (BMT)

Business Studies Department
Bladen Hall, Room 210
301-322-0080

BMT-1010 Introduction to Business. 3 Credits
Basic characteristics of the business enterprise, its organization and role in a free society. Formerly offered as MGT-1010. Students may not receive credit for both MGT-1010 and BMT-1010. Prerequisite: Reading proficiency.

BMT-1420 Organizational Management. 3 Credits
The rapidly changing business environment forces managers and entrepreneurs to adapt or exit the organization/market. Even if a manager possesses strong strategic management skills, without the ability to manage change and exert the leadership necessary to implement change, the organization will fail. This course is designed to provide an understanding of the forces behind organizational development (OD), the managerial tools used to implement OD, and the managerial skills that will enable the manager to effectively introduce change into the organization. Formerly offered as MGT 1420. Students may not receive credit for both MGT 1420 and BMT 1420. Prerequisite: Reading proficiency.

BMT-1500 Developing a Professional Image. 1 Credit
Techniques for developing a professional image. Attire, nuances of nonverbal communication and office etiquette. Formerly offered as MGT-1500. Students may not receive credit for both MGT-1500 and BMT-1500.

BMT-1550 Elements of Supervision. 3 Credits
The supervisory function of the first-line supervisor. Emphasis on decision making and problem solving using case studies and role playing. Formerly offered as MGT-1550. Students may not receive credit for both MGT-1550 and BMT-1550. Prerequisite: Reading proficiency.

BMT-1600 Principles of Management. 3 Credits
The business organization, the functions of management and the role of the manager in the decision-making process. Formerly offered as MGT-1600. Students may not receive credit for both MGT-1600 and BMT-1600. Prerequisite: Reading proficiency.

BMT-1620 Financial Planning and Investments. 3 Credits
Financial planning concepts, their application and the risk factor in the management of finances. Formerly offered as MGT-1620. Students may not receive credit for both MGT-1620 and BMT-1620. Prerequisite: Reading proficiency.

BMT-1650 Customer Service. 3 Credits
Examines the dynamics of exceptional customer service. Develops skills necessary in dealing with customers effectively, using creative techniques to improve communication skills to achieve customer satisfaction. Formerly offered as MGT-1650. Students may not receive credit for both MGT-1650 and BMT-1650. Prerequisite: Reading proficiency.

BMT-1710 The Business Plan. 3 Credits
Students develop professional business plans for the businesses they are interested in starting. The plans may be reviewed by business persons or bankers. Formerly offered as MGT-1710. Students may not receive credit for both MGT-1710 and BMT-1710. Prerequisite: Reading proficiency.

BMT-1800 Microcomputer Applications for the Business Manager. 3 Credits
Introduction to computer business applications: word processing, spreadsheets, databases, graphics and communications. Formerly offered as MGT-1800. Students may not receive credit for both MGT-1800 and BMT-1800. Prerequisite: Reading proficiency.
BMT-1900 Introduction to Public Administration. 3 Credits
An overview of public administration and its principles, evolution and current issues. Examine the role of government and nonprofit organizations in society. Formerly offered as MGT-1900. Students may not receive credit for both MGT-1900 and BMT-1900.

BMT-1960 Public Service Management. 3 Credits

BMT-1980 Business Startup Analysis. 1 Credit
Provides an investigation into a business idea, creating and starting the venture, the marketing and organization plans of a business in a logical manner, and researching how companies organize, lead, and manage the opportunity of entrepreneurship. Prerequisite: Reading proficiency.

BMT-1990 Special Topics: Money and Banking I. 3 Credits
Provides an in-depth study of the Federal Reserve System, financial institutions and the nature and effectiveness of the Federal Reserve's use of monetary policy tools. This course is the first of two that prepare students to make a presentation before officials at the Federal Reserve Bank in Baltimore. Formerly offered as MGT-1990. Students may not receive credit for both MGT-1990 and BMT-1990. (Also offered as ECN-1990. Students may not receive credit for both ECN-1990 and BMT-1990.) Prerequisite: ECN-1030 with B or higher and math proficiency.

BMT-2400 Strategic Management. 3 Credits
The increasing complexity of the global market requires managers to possess strong conceptual, strategic and tactical skills. This course provides an introduction to the strategic management process: strategy formation, strategy implementation and strategy evaluation. Application of strategic management concepts to case studies and projects will be used to reinforce students' mastery of the strategic management process. Formerly offered as MGT-2400. Students may not receive credit for both MGT-2400 and BMT-2400. Prerequisite: BMT-1010 or equivalent. Capstone Course: In addition to the prerequisite courses, students must complete a minimum of 47 credits prior to enrolling in this course. A minimum cumulative GPA of 2.00 or better is also required.

BMT-2500 Introduction to Federal Contracting. 3 Credits
Fundamental concepts and principles of the federal procurement system and use of the Federal Acquisition Regulation (FAR). Topics include the background of federal contracting, careers in contracting, types of contracting, competition, federal acquisition process, small purchase procedures, bids and proposals and the award/protest process. Formerly offered as MGT-2500. Students may not receive credit for both MGT-2500 and BMT-2500. Prerequisite: Reading proficiency.

BMT-2510 Introduction to Source Selection. 3 Credits
Experiencing the source selection process, developing a source selection plan, proposal preparation and evaluation. Content of course includes best and final offer (BAFO), contract format, proposal design, request for proposals (RFP), invitation for bid (IFB), types of source selection, cooperative purchasing, performance base contracting, best value procurement and open solicitations. Formerly offered as MGT-2510. Students may not receive credit for both MGT-2510 and BMT-2510. Prerequisite: Reading proficiency.

BMT-2520 Principles of Negotiations. 3 Credits
Negotiation skills, strategies and tactics to effectively prepare, conduct and document a successful negotiated contract using the negotiation process. Formerly offered as MGT-2520. Students may not receive credit for both MGT-2520 and BMT-2520. Prerequisite: Reading proficiency.

BMT-2530 Procurement Law. 3 Credits
The fundamental rules, regulations, policies and laws pertaining to procurement, changes in the law, remedies for bidders, procurement integrity and ethics. Formerly offered as MGT-2530. Students may not receive credit for both MGT-2530 and BMT-2530. Prerequisite: Reading proficiency.

BMT-2540 Contract Administration. 3 Credits
Management of the contract from beginning to the end to comply with the guidelines of the government rules and standards of the contract. Role of the contract officer and the agreement to complete the terms of the contract. Formerly offered as MGT-2540. Students may not receive credit for both MGT-2540 and BMT-2540. Prerequisite: Reading proficiency.

BMT-2550 Cost and Price Analysis. 3 Credits
Application of fundamental concepts and evaluation of contract price and cost principles. Formerly offered as MGT-2550. Students may not receive credit for both MGT-2550 and BMT-2550. Prerequisites: Reading and math proficiencies.

BMT-2580 Compensation and Benefits Management. 3 Credits
Fundamental concepts of compensation management, theory of organizational reward systems and methods of compensating employees. Topics include compensation objectives, employee benefits options, internal and pay structures, incentive programs, performance appraisals, union and government roles in compensation and international pay systems. Formerly offered as MGT-2580. Students may not receive credit for both MGT-2580 and BMT-2580. Prerequisite: Reading proficiency.

BMT-2590 Employee Training and Development. 3 Credits
Introduction to organizational training and development through the assessment of training needs in the workplace. Topics include designing and implementing training and development programs; methods of evaluating the effectiveness of these programs; and use of media and technology. Formerly offered as MGT-2590. Students may not receive credit for both MGT-2590 and BMT-2590. Prerequisite: Reading proficiency.

BMT-2610 Human Resource Management. 3 Credits
Principles and practices of human resource management in the business organization. Formerly offered as MGT-2610. Students may not receive credit for both MGT-2610 and BMT-2610. Prerequisite: Reading proficiency.

BMT-2620 Human Resource Information Systems. 3 Credits
An overview and analysis of various ways human resource professionals keep and monitor confidential information. Examine the systems required, justifications of needs, system costs, and implementation. Outsourcing will be examined as a viable alternative to implementing technological infrastructures. Prerequisite: BMT-1010 and INT-1010 (formerly CIS-1010).
BMT-2630 International Management. 3 Credits
This course provides future managers with the basic skills and knowledge necessary for transition into the world of international business. Formerly offered as MGT-2630. Students may not receive credit for both MGT-2630 and BMT-2630. Prerequisite: Reading proficiency.

BMT-2650 Purchasing, Contracting and Materials Management. 3 Credits
Procurement and materials management, including specifications, source selection, pricing, contracting and inventory control. Formerly offered as MGT-2650. Students may not receive credit for both MGT-2650 and BMT-2650. Prerequisite: Reading proficiency.

BMT-2660 Conflict Management. 3 Credits
Powerful techniques for dealing effectively and confidently with difficult situations. Building and strengthening more cooperative and productive working relationships. Formerly offered as MGT-2660. Students may not receive credit for both MGT-2660 and BMT-2660. Prerequisite: Reading proficiency.

BMT-2670 Sports Management. 3 Credits
Focuses on the foundations of the sports management function, preparation of professionals to apply communication, leadership and managerial skills in a variety of career positions in the sports management field. Students will develop knowledge, skills, and application processes to become effective in various positions. Prerequisite: BMT-1010.

BMT-2680 Entrepreneurship. 3 Credits
Coverage of the basic characteristics of entrepreneurship and the free enterprise system. The course is designed to acquaint students with the many diverse areas of entrepreneurship, from beginning to end, including but not limited to: identifying a viable product or service, target markets, financing and ethics. It is designed to provide further understanding of the vital role of business ownership in a free society. Formerly offered as MGT-2680. Students may not receive credit for both MGT-2680 and BMT-2680. Capstone Course: Students must complete a minimum of 47 credits prior to enrolling in this course. A minimum cumulative GPA of 2.00 or better is also required.

BMT-2700 Stress Management in the Workplace. 3 Credits
Designed to provide a comprehensive approach to stress management. Through a combination of lectures, experiential learning and self assessment, students will have an opportunity to develop their own strategy for stress management. Formerly offered as MGT-2700. Students may not receive credit for both MGT-2700 and BMT-2700. Prerequisite: Reading proficiency.

BMT-2720 Managing Workplace Diversity. 3 Credits
This course examines diversity in the workplace and the resulting challenges to corporate culture in developing an understanding of diversity. Formerly offered as MGT-2720. Students may not receive credit for both MGT-2720 and BMT-2720. Prerequisite: Reading proficiency; MGT-1600 recommended.

BMT-2750 Leadership Development. 3 Credits
Development of practical, effective workplace leadership skills through study, observation and application. Integrates readings from humanities, experiential exercises, films and contemporary readings on leadership. (Credit may not be received for both SPH-2750 and BMT-2750.) Formerly offered as MGT-2750. Students may not receive credit for both MGT-2750 and BMT-2750. Prerequisites: Reading and oral proficiency. (Honors version available.)

BMT-2860 Cyber Law. 3 Credits
Examines current and emerging cyber law issues that are critical to business, government and individuals. Students will examine jurisdiction; protection of intellectual property; contracts and licensing agreements; sales tax; raising equity capital online; privacy; obscenity in cyberspace; defamation; Internet and information security; computer crime; and ethics. The goal is to address these issues in a practical, business-oriented manner and to advance sophistication in the field. As this is a dynamic discipline, subject areas and course materials may vary, as needed, with future developments in the field. Formerly offered as MGT-2860. Students may not receive credit for both MGT-2860 and BMT-2860. Prerequisite: Reading proficiency. BUS-1220 recommended.

BMT-2882 Health Care Management. 3 Credits
Explores basic concepts of management theory as applied to health care. Students will examine the structure of the health care delivery system and management functions such as planning, organizing, directing and controlling. They also will approach health care from a systems and efficiency perspective. Emphasis also will be placed on the need for cost controls as a way of ensuring quality health care. Prerequisite: Reading proficiency.

BMT-2880 Emergency Management. 3 Credits
Provides individuals and organizations with tools to prepare for and recover from both natural and man-made disasters. Students will gain an understanding of risk and crisis management, the need for business continuity and information assurance planning, as well as addressing the leadership, human, organizational and public policy components of disasters. The final project will be a disaster recovery management plan. Formerly offered as MGT 2880. Students may not receive credit for both MGT-2880 and BMT-2880. Prerequisite: Reading proficiency.

BMT-2890H Honors Colloquium in Management. 3 Credits
This honors colloquium will examine special topics in the field of management and their relevance across disciplinary perspectives. The issues to be addressed in each colloquium will vary from semester to semester. These courses are designed for students in the Honors program, but are open to others with the approval of the honors coordinator and the instructor. Formerly offered as MGT-2890H. Students may not receive credit for both MGT-2890H and BMT-2890H. Prerequisites: Reading proficiency and permission of instructor or honors coordinator.

BMT-2910–2930 Cooperative Education. 1–3 Credits

BMT-2960 Emotional Intelligence in the Workplace. 3 Credits
Superior performance requires both intellectual and emotional intelligence. This course provides a fundamental understanding of how emotional intelligence (EI) impacts communication, leadership and decision-making styles as well as how to better utilize EI in managing cross-functional teams and overall workforce productivity. Formerly offered as MGT-2960. Students may not receive credit for both MGT-2960 and BMT-2960. Prerequisite: Reading Proficiency.
BMT-2990 Special Topics: Money and Banking II. 1 Credit
Uses the concepts learned in BMT-1990 to develop a presentation on monetary policy that a team of students will deliver to Federal Reserve Officials at the Federal Reserve Bank in Baltimore. (Also offered as ECN-2990. Students may not receive credit for both ECN-2990 and BMT-2990.) Formerly offered as MGT-2990. Students may not receive credit for both MGT-2990 and BMT-2990. Prerequisite: BMT-1990.

Business Marketing (BMK)

Business Studies Department
Bladen Hall, Room 210
301-322-0080

BMK-2510 Introduction to Marketing. 3 Credits
Principles and techniques of marketing goods and services, including advertising, sales promotion, retailing and wholesaling. Formerly offered as MKG-2510. Students may not receive credit for both MKG-2510 and BMK-2510. Prerequisite: Reading proficiency.

BMK-2600 Sports Marketing. 3 Credits
Investigates basic foundations, marketing strategies and promotion techniques related to sports marketing. Students will explore the four domains of sports marketing, an introduction to sponsorship, licensing, endorsements, distribution, and emerging issues and careers in sports marketing. Prerequisite: BMK-1010.

BMK-2630 International Marketing. 3 Credits
An understanding of the principles of marketing within the context of the international market. Formerly offered as MKG-2630. Students may not receive credit for both MKG-2630 and BMK-2630. Prerequisite: Reading proficiency.

BMK-2710 Salesmanship. 3 Credits
Ideas and techniques used in selling and their relationship to specific products and services. Development and maintenance of a sales organization and its personnel. Formerly offered as MKG-2710. Students may not receive credit for both MKG-2710 and BMK-2710. Prerequisite: Reading proficiency.

BMK-2730 Retail Business Management. 3 Credits
Overview of retail business, including types of businesses, their organization, retail buying, selling, advertising and merchandising. Formerly offered as MKG-2730. Students may not receive credit for both MKG-2730 and BMK-2730. Prerequisite: Reading proficiency.

BMK-2770 Advertising. 3 Credits
Overview of the advertising world, including use of media, research and development of ideas, writing copy and producing radio and television commercials. Formerly offered as MKG-2770. Students may not receive credit for both MKG-2770 and BMK-2770. Prerequisite: Reading proficiency.

BMK-2910–2930 Cooperative Education. 1–3 Credits

Business Real Estate (BRE)

Business Studies Department
Bladen Hall, Room 210
301-322-0080

All real estate courses are offered in both credit and noncredit modes. Noncredit CEUs in RES 329 may be converted to academic credit through examination. RES 368 and RES 369 can be converted to BRE-2030. Consult program coordinator for details.

BRE-1030 Real Estate Principles and Practices for Salespersons. 4 Credits
Satisfies the 60-hour educational requirement for real estate salesperson licensure. Introduces concepts of property type, various interests in real estate and how they are held, property description, agency, real estate mathematics, property valuation, finance, settlement computations, contract law, real estate finance, transfer of title and taxation.

BRE-1030 continues on next page
BRE-1030 continues from previous page

It also presents details of Maryland real estate license law and relevant sections of real property and other statutes that affect the delivery of real estate brokerage services dealing with agency, property disclosure, Fair Housing, real estate ethics and environmental concerns. Formerly offered as RLS-1030. Students may not earn credit for both RLS-1030 and BRE-1030. Prerequisite: Reading proficiency.

BRE-2030 Real Estate Finance and Investment. 3 Credits
Decision-making analysis for real estate investment based on both the characteristics of the investment property and the availability and cost of funds appropriate for the project. Cash-flow forecasting, arranging financing, creative financing, tax implications and timing of disposal of property. Uses spreadsheets and financial calculators. Formerly offered as RLS-2030. Students may not earn credit for both RLS-2030 and BRE-2030. Prerequisites: Reading and arithmetic proficiency.

BRE-2910–2930 Cooperative Education. 1–3 Credits

Career Assessment and Planning (CAP)

Career Assessment and Planning Department
Bladen Hall, Room 122
301-322-0886

CAP-1020 Achieving College Success. 2 Credits
Techniques, skills, attitudes and behaviors associated with effective learning and college success. Includes test taking, memory, study skills, time management and personal goal setting. (Credit may not be received for both CAP-1020 and CAP-1100.)

CAP-1050 Portfolio Development. 3 Credits
Students develop a portfolio that documents college-level learning acquired from life/work experience including business, the military and volunteer/community involvement. Required for Prior Learning Assessment (PLAN) credit through the portfolio assessment process. Prerequisite: Reading and English proficiency and permission of PLAN coordinator.

CAP-1100 Introduction to College Life. 3 Credits
This course helps the student adapt to the college community and explore the purposes of higher education and the potential roles of the student within the college. Students will focus on the development of personal and academic goals, develop learning strategies to enhance their academic success and acquire a working/practical knowledge of campus resources, services and procedures. (Credit may not be received for CAP-1100 and CAP-1020 or CAP-1300.)

CAP-1110 Effective Test Taking. 1 Credit
This course provides students with an opportunity to develop an awareness of how they can attain peak performance by recognizing test performance anxiety, analyzing negative self-talk and working in study groups to enhance performance. Students will focus on developing strategies to prepare for and take exams.

CAP-1300 Choosing Your College Major. 1 Credit
Develops a profile of student interests and abilities and identifies college majors that match individual strengths and current job outlook. (Credit may not be received for both CAP-1300 and CAP-1100.)

CAP-1310 Career Assessment and Planning. 3 Credits
An intensive, comprehensive exploration of students’ marketable skills, interests, abilities and values. Follows a career decision-making process that results in clear career goals and implementation plans.

CAP-1320 Getting a Job and Keeping It. 1 Credit
This course is designed for students who are in the process of searching for a job. It will help the student begin to understand their most valuable career asset—their unique talent—in the form of marketable skills. The student will learn procedures designed to develop skills that will match their talents with a job, help them acquire that “dream” job and help them grow in their job/career.

CAP-1330 Choosing a Career in Allied Health. 2 Credits
A dynamic course integrating theory and clinical training covering a variety of allied health professions. Students will participate in classroom instruction and direct clinical observation of each profession at local medical centers. Students will have an opportunity to observe open-heart surgery and an optional autopsy at the Anatomy Board.

Chemistry (CHM)

Physical Sciences and Engineering Department
Chesapeake Hall, Room 100
301-322-0420

CHM-1010 General Chemistry I. 4 Credits Sc
University-parallel introductory chemistry sequence. Structure of matter, bonding, reactions and changes of state. Prerequisite: MAT-0104 or appropriate test score. 3 class/3 lab/1 rec hours.

CHM-1020 General Chemistry II. 3 Credits Sc
Continuation of university-parallel sequence. Systems in equilibrium, thermodynamics, electrochemistry, kinetics and nuclear chemistry. Prerequisite: CHM-1010.

CHM-1030 General Chemistry II Laboratory. 2 Credits
Introduction to quantitative, qualitative and instrumental analysis with applications to a broad range of chemical systems. Prerequisite: CHM-1010; CHM-1020 completed or concurrent. 1 class/3 lab hours.

CHM-1120 Essentials of Organic and Biochemistry. 4 Credits
A one-semester survey of organic chemistry. Introduction to organic nomenclature and reactions, characteristics of biochemical compounds with biological applications and basic laboratory procedures. Prerequisite: CHM-1010. 3 class/4 lab hours.

CHM-2010 Organic Chemistry I. 4 Credits
University-parallel organic chemistry sequence. Classes of organic compounds and their reactions, stereochemistry and reaction mechanisms and basic laboratory techniques for synthesis and analysis. Prerequisite: CHM-1020. 3 class/4 lab hours.
CHM-2020 Organic Chemistry II. 3 Credits
Continuation of CHM-2010 with emphasis on reaction mechanisms, synthesis and spectroscopy of organic compounds. Prerequisite: CHM-2010.

CHM-2020 Organic Chemistry II Laboratory. 2 Credits
Experiments in organic synthesis and analysis of compounds from CHM-2020 with emphasis on microscale and instrumental techniques, including spectroscopy. Prerequisite: CHM-2020 completed or concurrent. 4 lab hours.

CHM-2050 Instrumental Analysis. 4 Credits
The use of scientific instruments in forensic testing is the focus of this course. Lectures and laboratories cover instrumentation theory, data systems, method development and qualitative and quantitative analytical techniques. Techniques discussed with laboratory activities include gas chromatography (GC), infrared spectrometry (IR), ultraviolet-visible spectrometry (UV-Vis), high-performance liquid chromatography (HPLC) and gas chromatography-mass spectrometry (GC-MS). (Credit will not be given for both FOS-2050 and CHM-2050). Prerequisites: CHM-1020 and 1030. 3 class/4 lab hours. (Offered spring only.)

CHM-2890H Honors Colloquium in Chemistry. 3 Credits
This Honors Colloquium will examine special topics in the field of Chemistry and its relevance across disciplinary perspectives. The issues to be addressed in each colloquium will vary from semester to semester. These courses are designed for students in the Honors program, but are open to others with the approval of the Honors Coordinator or the instructor. Prerequisites: Reading proficiency and permission of the instructor or honors coordinator.

CHM-2910-2930 Cooperative Education. 1–3 Credits

CHM-2990H Honors Seminar in Engineering and Science (Special Topics). 1 Credit
Seminar course that introduces and studies emerging issues in science, engineering, technology, and mathematics. Topics vary by semester. Also offered as BIO-2990H and EGR-2990H. Prerequisites: A 3.00 GPA, completion of a minimum of 18 credits in courses offered by the division of Science, Technology, Engineering and Mathematics, and permission of the instructor or the honors program coordinator.

Chinese (CHN)

Language Studies Department
Bladen Hall, Room 309
301-322-0946

CHN-1000 Chinese for Beginners. 3 Credits
Designed for students who are true beginners without any background knowledge of the Chinese language. This course will focus on the four skills of listening, speaking, reading and writing. Students will learn Mandarin pronunciation, grammar and Chinese characters. Prerequisite: CHN-1000. 3 class/1 lab hour or equivalent.

CHN-1010 Elementary Chinese. 3 Credits
A continuation of CHN-1000 which will focus on the four skills of listening, speaking, reading and writing. Students will learn
CSM-1470 Construction Planning and Scheduling. 3 Credits
Comprehensive overview and analysis of the requirements and use of planning and scheduling as an effective management tool. Includes the use of Microsoft Project with special emphasis on the planning process. (May also be taken as a noncredit course, CST-354 Construction Planning and Scheduling.)

CSM-1480 Construction Estimating. 3 Credits
Introduction to construction estimating, including its purpose, methods of preparing estimates, types of estimates and handling of construction trades. (May also be taken as a noncredit course, CST-383 Construction Estimating I.) Prerequisite: CSM-1410.

CSM-1500 Construction Surveying. 3 Credits
A course designed for construction personnel who must implement and lay out a site development plan. Lectures and hands-on field work help the student develop an understanding and use of the builder transit/level in all phases of construction. Recommended: MAT-1120, completed or concurrent.

CSM-1510 Residential Construction Management. 3 Credits
An overview of the residential construction process, from concept through design, finance and construction, to turnover. This course is aimed at the owner/builder and is designed to explain his/her role in each step of the process. (May also be taken as a noncredit course, CST-346 Build Your Own House.)

CSM-1600 Construction Safety. 3 Credits
OSHA policies, procedures, standards and safety and health principles, including the scope and application of the 29 CFR-1926. Students successfully completing the course will receive OSHA 30-hour construction safety cards. (May also be taken as a noncredit course, CST-311 Construction Safety.)

CSM-1830 Construction Print Reading. 3 Credits
Covers reading and interpreting construction drawings and specifications of residential and light commercial buildings. Emphasis is on the architectural, mechanical and site aspects of working drawings. Topics include plan and elevation views, symbols and notations, scaling and dimensional practices, structural information, detail drawings, plot plans, and reading drawings for trade information. (May also be taken as a noncredit course, CST-345 Construction Print Reading.)

CSM-1850 Construction Quality Control. 3 Credits
General overview of the contractor's quality control (QC) as it pertains to each trade on the job. Includes documentation, support and the interaction between construction and QC. (May also be taken as a noncredit course, CST-309 Construction Quality Control.)

CSM-1860 Construction Codes. 3 Credits
Overview, basis and structure of the International Building Code, with emphasis on commercial construction. Provides students with the ability to conduct a code compliance inspection.

CSM-2310 Construction Entrepreneurship. 3 Credits
The initial considerations and decisions needed to successfully start a construction company, plus the business and regulatory requirements that must be met during the startup phase of a construction business. (May also be taken as a noncredit course, CST-389 Start Your Own Construction Company.)

CSM-2410 Communication and Computers in Construction. 3 Credits
This course combines the everyday communications that are a vital part of the construction process with the use of computers as their main tool. The communication side covers the four main avenues (speaking, listening, reading, writing) with clarity and focus. The computer side covers spreadsheets, word processing, scheduling and money control.

CSM-2450 Construction Management II. 3 Credits
Contracting requirements of the construction project. Requirements stated in contract documents incorporate the scope of work and terms and conditions between the client and constructor. Course emphasizes the importance of economics and legal ramifications of the project documents. Prerequisite: CSM-1450. (May also be taken as a noncredit course, CST-396 Construction Management II.)

CSM-2610 Building Mechanical and Electrical Systems. 3 Credits
Overview of the systems in a commercial building—plumbing, HVAC, sprinkler, elevator, electrical (power, fire alarm, communications, and security) and their controls. Emphasis is on understanding system function and interconnection, rather than design. (May also be taken as a noncredit course, CST-415, Mechanical and Electrca Systems in Construction)

CSM-2850 Leadership in Construction. 3 Credits
Principles of effective leadership as they apply to the construction industry, both in the field and in the office. Directed to all levels of responsibility from field foreman to upper management.

CSM-2900 Construction Enterprise Project. 3 Credits
Working in teams, students will use the knowledge gained in previous courses to manage a multi-million-dollar construction project from start to finish. The teams will be presented with an initial design and create bids and schedules to run the job. Supervising faculty will present the teams with problems, disputes, and conflicts that must be dealt with to successfully complete a quality product on time and within budget. The teams also will produce written reports and oral presentations during the project. Prerequisites: CSM-1450, CSM-1460, CSM-1470, CSM-1480, and CSM-1830. **Capstone Course:** In addition to all prerequisites, students must complete a minimum of 46 credits of courses relevant to the major prior to enrolling in this course. A minimum cumulative GPA of 2.00 or better is also required.

CSM-2910-2930 Cooperative Education. 1-3 Credits

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Correctional Services (COR)

Public Safety and Law Department
Bladen Hall, Room 208
301-322-0553

COR-1510 Introduction to Corrections. 3 Credits
Introduction to the field of corrections as it relates to the justice system. Focuses on the history of corrections and the forms of criminal sanctions at the federal, state and local levels. (Formerly COS-151) Prerequisite: Reading proficiency.
CJT-1510 Introduction to Criminal Justice. 3 Credits
A survey of the history, philosophy and social development of police, courts and corrections in a democratic society. Identification and operations of local, state and federal agencies will be covered with criminal justice career orientation. Prerequisite: Reading proficiency.

CJT-1520 Police Operations. 3 Credits
Understanding the duties, authority, responsibilities and rights of the uniformed police officer. Emphasis is on the function of the patrol officer as it relates to criminal investigation, intelligence, vice units and traffic administration. Prerequisite: Reading proficiency.

CJT-1530 Law Enforcement and the Community (Cross-Cultural Relations). 3 Credits
A study of the relationship between police and the community with recommendations for ways of working together to reduce crime. Emphasis is placed on policing in a culturally diverse society. (Credit may not be received for both SOC-1530 and CJT-1530.) Prerequisite: Reading proficiency.

CJT-1540 Police Management. 3 Credits
A study of the administration of police to include the organizational structure, function and theory related to the practice of police management. Prerequisite: Reading proficiency.

CJT-1550 Juvenile Delinquency. 3 Credits
Examines studies of youth crime: its volume, causes and trends. The prediction, prevention, treatment and control of juvenile delinquency by social control agencies is examined relative to social policies needed to reduce its incidence. The organization and procedures of the juvenile justice system will be explored. Prerequisite: Reading proficiency.

CJT-1620 Victimology. 3 Credits
The study of the victims of crime and their impact on the administration of justice. Prerequisite: Reading proficiency. (Offered spring semester only.)

CJT-1700 Domestic Violence. 3 Credits
The study of domestic violence and the ways in which the criminal justice system deals with this problem. Prerequisite: Reading proficiency. (Offered only in the fall semester.)

CJT-1730 Introduction to Security. 3 Credits
An introduction to the basic principles and concepts of security and asset protection, from historical and modern-day points of view. Emphasis is on the protection of assets, personnel and facilities involving both private and government entities.

CJT 1740 Security Operations. 3 Credits
An examination of the increasing role private security plays in crime prevention, detection and investigation. Emphasis is on physical and procedural operations.

CJT-2510 Criminal Law. 3 Credits
The study of substantive criminal law as applied to the local, state and federal systems. Court decisions are used to address various sources and types of criminal laws. Prerequisite: Reading proficiency.

CJT-2530 Criminal Investigation. 3 Credits
A study of the fundamental principles and procedures employed in the investigation of crime. Emphasis is placed on the investigation of specific crimes, the identification of sources of information and the procedures necessary for the proper handling of evidence. The course is designed to develop a working knowledge of the steps of investigation beginning with the initial security of the crime scene and concluding with the presentation of evidence and proper testimony in court. Prerequisite: Reading proficiency.

CJT-2540 Criminal Evidence and Procedure. 3 Credits
An examination of the principles and techniques of criminal procedure employed during trials to determine the admissibility of physical and testimonial evidence. An analysis of laws and court decisions relating to admissibility is emphasized. Prerequisite: Reading proficiency.

CJT-2560 Terrorism. 3 Credits
An overview of the historical aspects of terrorism, past and present. Students will learn the origins, causes and issues and how the media plays a part in today’s world of terrorism. Prerequisite: Reading proficiency.

CJT-2800 Professional Ethics in Criminal Justice. 3 Credits
Examines the decision-making process of those involved in the field of public safety, including law enforcement and corrections, as it relates to morals, values, integrity, discretion and authority. The course queries ethics relating to the fair and equal treatment of those involved in the criminal justice process to include criminal justice personnel, victims, and criminals. Topics relating to the history, definition, categories, and theories of ethics; lying and deception as it relates to the field of criminal justice; prejudice and discrimination in the field of criminal justice; and abuse of authority specific to the field of criminal justice will be examined. Prerequisite: Reading proficiency.

CJT-2900 Capstone Seminar in Criminal Justice. 3 Credits
This course is the culmination of the criminal justice students’ academic experience. It serves to synthesize the knowledge gained from courses taken within the criminal justice curriculum and better prepare
CUL-2300 Advanced Baking and Pastry. 3 Credits
A continuation of CUL-1300. Topics include tarts, cakes, and restaurant-style desserts, production and use of sauces and plate presentations. Students will be required to create a dessert menu and demonstrate baking proficiency through production of selected menu items. Prerequisites: CUL-1100 and CUL-1300. 1 class/4 lab hours

CUL-2450 International Cuisine. 3 Credits
A continuation of CUL-2150. Production will include French, Italian, Asian and other ethnic and regional cuisines. Discussion topics will include indigenous ingredients, flavors, cooking methods and techniques. Prerequisite: CUL-2150. 1 class/4 lab hours.

CUL-2760 Internship. 3 Credits
This course is a 600-hour paid work internship in a food production environment (Two 300-hour internships). Student will prepare a report detailing their experience. Students are required to have the internship approved by the program coordinator. Prerequisite: CUL-1150 and permission of the program coordinator.

Culinary Arts (CUL)

Hospitality, Tourism and Culinary Arts Department
Chesapeake Hall, Room 100
301-341-3090

CUL-1100 Introduction to Culinary Arts. 3 Credits
Introductory food production class for culinary students. Topics include the theories and methods of cooking, vocabulary and the development of safe and sanitary kitchen practices. Production items will include vegetable and starch preparation, stocks and soups and egg cookery. Prerequisite: HSM-1550 completed or concurrent. 2 class/2 lab hours.

CUL-1150 Food Production I. 3 Credits
A continuation of CUL-1100. Topics include stocks, soups, sauces, beef, pork and poultry items, vegetables and starches. Utilizing recipes and techniques as presented in class, students will prepare a number of buffets. Prerequisite: CUL-1100. 1 class/4 lab hours

CUL-1300 Baking Skills. 3 Credits
An introductory course in the principles of baking, with emphasis on bakeshop ingredients, their function, measurement and scaling. Scratch baked items to include quick breads and muffins, yeast breads, cookies, Danish pastries and assorted pies. Prerequisite: CUL-1100. 1 class/4 lab hours

CUL-2150 Food Production II. 3 Credits
An advanced food production class. Production topics will include principles of plate presentation, entrée, starch, vegetables, seafood, veal, and lamb cookery. Additional topics will include menu construction, pricing and production. Prerequisite: CUL-1150. 1 class/4 lab hours

CUL-2200 Garde Manger and Catering. 3 Credits
This course focuses on cold food preparation and presentation in buffet and catering applications, including appetizers, hors d’oeuvres, canapés, pates, sausages, terrines and buffet salads, buffet design, layout and execution and menu planning. Prerequisite: CUL-2150. 1 class/4 lab hours

CJT-2910–2930 CJT Internship. 1–3 Credits
The internship is a practicum with measurable learning objectives designed to broaden the educational experience. Students are assigned to appropriate governmental and private criminal justice agencies.

Developmental English (DVE)

Developmental English and Reading Department
Marlboro Hall, Room 2118
301-322-0495

Courses meet for 3 class hours and 2 open-lab hours per week or equivalent.

DVE-0009 Fundamental Language Skills. 0 Credits (4 EHs)
Preparation for DVE-0011. This course helps students write various types of clear, concise sentences and coherent paragraphs. It emphasizes basic sentence structure and includes practice with subjects and verbs, fragments and run-on sentences and sequence of tenses. Four equivalent hours (EHs) awarded for successful completion. (Formerly DLS 0031. Students who have passed DLS 0031 should not take this course.)

DVE-0011 Developmental Composition. 0 Credits (4 EHs)
Preparation for credit-level English. This course develops basic English skills and familiarizes students with the fundamental principles of written communication. It emphasizes writing clear, effective paragraphs and correcting weaknesses in sentence structure, grammar and usage. Four equivalent hours (EHs) awarded for successful completion.

Developmental Learning Support (DLS)

Learning Foundations Division
Marlboro Hall, Room 2118
301-322-0495

DLS-0011 Fundamental Arithmetic Skills. 0 Credits (2 EHs)
Preparation for DVM-0031. Review of basic arithmetic operations on whole numbers, fractions and decimals, including number properties. Two equivalent hours (EHs) awarded for successful completion.
Developmental Math (DVM)

Developmental Mathematics Department
Marlboro Hall, Room 2118
301-322-0495

The Developmental Mathematics courses prepare students for programs that require MAT-0104 as a prerequisite. All students enrolling in their first DVM course must take PAS-1030 Math Confidence Building (1 Credit) or PAS-1010 Principles and Strategies of Successful Learning (3 Credits) during that same semester.

The Developmental Mathematics Sequence (DMS), which includes DVM-0031, DVM-0071 and MAT-0104, has been redesigned. The DMS is being introduced in the fall 2012 semester (in sections ending with the letter “M”), with full implementation in the spring, 2013 semester. These newly formatted classes will be very different from traditional mathematics classes. They will be scheduled in modern computer classrooms featuring an individual computer-based study using a sequence of modules. Students must master the content of one module before moving to the next module. An instructor-tutor team will be assigned to each class and will provide students guidance and mini-lessons when needed and will include supplemental learning activities. This new design model offers students the opportunity to work and progress more rapidly through the developmental mathematics sequence, possibly reducing the time required to complete developmental coursework. The goal is for students to complete the DMS and to then be successful in credit-level mathematics courses needed to earn a degree.

DVM-0021 Arithmetic and Algebra Review. 0 Credits (1 EH)
This is not a regular class in the DVM sequence. This is a review course only. Includes all content of DVM-0031 and DVM-0071. The math placement exam must be taken on the last day of the course. The exam score will determine actual placement in the appropriate DVM or MAT class. One equivalent hour (EH) awarded for successful completion. 1 class/1 lab hour per week.

DVM-0031 Prealgebra. 0 Credits (4 EHs)
Preparation for DVM-0071. Review of basic arithmetic operations; applications including ratio and proportion, percent, geometry, measurement and statistics; signed numbers and equations. Four equivalent hours (EHs) awarded for successful completion. Prerequisites: Reading proficiency or concurrent enrollment in DVR-0051 and satisfactory basic mathematics placement test score. 4 class/1 lab hour per week.

DVM-0071 Introductory Algebra. 0 Credits (4 EHs)
Preparation for MAT-0104. Linear equations and inequalities, graphing, polynomials, algebraic fractions, radicals, quadratic equations and applications. Four credit-hour load equivalent. Four equivalent hours (EHs) awarded for successful completion. Prerequisite: Reading proficiency or concurrent enrollment in DVR-0061 and satisfactory placement test score or completion of DVM-0031 with grade of C or better is required. 4 class/1 lab hour per week.

DVM-0081 Elementary and Intermediate Algebra Review. 0 Credits (1 EH)
This is not a regular class in the DVM sequence. This is a review course only. Includes all content from DVM-0071 and MAT-0104.

The math placement exam must be taken on the last day of the course. This exam score will determine actual placement in the appropriate DVM or MAT class. One equivalent hour (EH) awarded for successful completion. Prerequisite: Satisfactory placement score or successful completion of DVM-0031. 1 class/1 lab hour per week.

Developmental Reading (DVR)

Developmental English and Reading Department
Marlboro Hall, Room 2118
301-322-0495

Courses meet for 3 class hours and 2 open-lab hours per week or equivalent.

DVR-0051 Developmental Reading. 0 Credits (4 EHs)
This course develops basic reading skills including vocabulary, comprehension and study skills. It emphasizes using phonics and structure to analyze unfamiliar words, acquiring general vocabulary through context clues and affixes and comprehending sentences and paragraphs through main ideas, details, inferences and fact and opinion. Four equivalent hours (EHs) awarded for successful completion. 3 class/2 lab hours.

DVR-0061 College Reading and Study Skills. 0 Credits (4 EHs)
This course improves students’ skills in vocabulary, comprehension and studying. Application of these skills will enable a student to read his/her college textbooks more effectively and efficiently. Topics include topic, main idea, details, writing patterns, critical reading and note taking. Four equivalent hours (EHs) awarded for successful completion. Successful completion meets the Reading proficiency required for enrollment in credit courses. 3 class/2 lab hours. Students enrolled in DVR-0061 must take PAS-1010 in the same semester.

DVR-0071 Accelerated College Reading and Study Skills. 0 Credits (2 EHs)
Preparation for credit courses requiring the reading prerequisite. A fast-paced course with emphasis on critical reading and thinking, summarizing, paraphrasing as well as the basic reading elements—main ideas, supporting details, inferences, and patterns of organization. Two equivalent hours (EHs) awarded for successful completion. Students must enroll in DVR-0061 if this course is failed. Prerequisite Reading Placement Test score of 70–78.

Early Childhood Education (ECE)

Teacher Education Department
Marlboro Hall, Room 2118
301-322-0780 or 301-583-5250

All ECE courses may now be found under a new subject heading, Teacher Education (TED) located later in this chapter.
**Economics (ECN)**

Business Studies Department  
Marlboro Hall, Room 2054  
301-322-0525

ECN-1010 Economic Development. 3 Credits  
SS  
Development of American capitalism, including evolution of the capitalist system and roles of agriculture, manufacturing, trade, transportation, communication, money and banking, government and international trade. Prerequisite: Reading proficiency.

ECN-1030 Principles of Macroeconomics. 3 Credits  
SS  
First semester of university-parallel sequence. Introduction to economic macroanalysis, emphasizing gross national product, national income, consumption, investment, taxation, government spending and monetary and fiscal policies. Prerequisites: Reading and mathematics proficiencies or DVM-0071 completed or concurrent.

ECN-1040 Principles of Microeconomics. 3 Credits  
SS  
Second semester of university-parallel sequence. Introduction to economic microanalysis, focusing on the role of the individual consumer and the behavior of businesses under different market conditions. Prerequisites: Reading and mathematics proficiencies or DVM-0071 completed or concurrent.

ECN-1990 Special Topics: Money and Banking I. 3 Credits  
This special topics course provides an in-depth study of the Federal Reserve System, financial institutions and the nature and effectiveness of the Federal Reserve’s use of monetary policy tools. This course is the first of two that prepare students to make a presentation before the Federal Reserve Bank in Baltimore. (Also offered as BMT-1990. Students may not receive credit for both ECN-1990 and BMT-1990.) Prerequisites: Math proficiency; ECN-1030 with a B or higher.

ECN-2890H Honors Colloquium in Economics. 3 Credits  
This honors colloquium will examine special topics in the field of economics and its relevance across disciplinary perspectives. The issues to be addressed in each colloquium will vary from semester to semester. These courses are designed for students in the Honors program, but are open to others with the approval of the honors coordinator or the instructor. Prerequisite: Reading proficiency and permission of instructor or honors coordinator.

ECN-2910–2930 Cooperative Education. 1–3 Credits

ECN-2990 Special Topics: Money and Banking II. 1 Credit  
Uses the concepts learned in ECN-1990 to develop a presentation on monetary policy that a team of students will deliver to the Federal Reserve officials at the Federal Reserve Bank in Baltimore. (Also offered as BMT-2990. Students may not receive credit for both ECN-2990 and BMT-2990.) Prerequisite: ECN-1990 or BMT-1990.

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**Electrical Construction Technology (ECT)**

Construction and Energy Institute  
301-322-0034

ECT course enrollment is restricted to participants in the IBEW Local 26 apprenticeship program, 301-429-2575.

ECT-1010 Electrical Construction Technology, Year 1A. 3 Credits  
Study of conductor types, conduit, electrical symbols and blueprint reading. Basic electrical circuit calculations using voltage, current, resistance and power. The combination of ECT-1010 and 1020 equates to ACE’s 0001NJAT course. Prerequisite: member of the IBEW Local 26 apprenticeship program. 2 class/2 lab hours.

ECT-1020 Electrical Construction Technology, Year 1B. 3 Credits  
Study of parallel and series DC circuits, superposition, Kirchhoff’s voltage and current laws; Thevenin and Norton equivalent circuits and three-wire, single-phase circuits with grounding. The combination of ECT-1010 and 1040 equates to ACE’s 0002NJAT. Prerequisites: ECT-1010, member of the IBEW Local 26 apprenticeship program. 2 class/2 lab hours.

ECT-1030 Electrical Construction Technology, Year 2A. 3 Credits  
Study of multimeter and oscilloscope use and AC circuits, including series and parallel capacitive and inductive circuits. The combination of ECT-1030 and 1040 equates to ACE’s 0002NJAT. Prerequisites: ECT-1020 member of the IBEW Local 26 apprenticeship program. 2 class/2 lab hours.

ECT-1040 Electrical Construction Technology, Year 2B. 3 Credits  
Analysis of series and parallel RC, RL and RLC circuits. Includes series and parallel resonance, filters, power factor, transformers, and three-phase systems. The combination of ECT-1030 and 1040 equates to ACE’s 0002NJAT. Prerequisites: ECT-1030, member of the IBEW Local 26 apprenticeship program. 2 class/2 lab hours.

ECT-2010 Electrical Construction Technology, Year 3A. 3 Credits  
Analysis and measurement of semiconductor circuits—diodes, transistors, rectifier circuits, amplifiers, operational amplifiers and SCRs. The combination of ECT-2010 and 2020 equates to ACE’s 0003NJAT. Prerequisites: ECT-1040, member of the IBEW Local 26 apprenticeship program. 2 class/2 lab hours.

ECT-2020 Electrical Construction Technology, Year 3B. 3 Credits  
Study of the complete electrical system, including grounding and overcurrent protection systems, three-phase transformers using WYE and DELTA connections, motor control circuits and protection. The combination of ECT-2010 and 2020 equates to ACE’s 0003NJAT. Prerequisites: ECT-2010, member of the IBEW Local 26 apprenticeship program. 2 class/2 lab hours.

ECT-2030 Electrical Construction Technology, Year 4A. 3 Credits  
In both classroom and field experience, students learn basic theory and demonstration skills in HVAC, motor controls, electronics and industrial electronics. The combination of ECT-2030 and 2040 equates to ACE’s 0004NJAT.

Note: This course is restricted to participants of the IBEW Local 26 apprenticeship program.
ECT-2040 Electrical Construction Technology, Year 4B. 3 Credits
In both classroom and field experience, students expand skills learned in ECT-2030 and will demonstrate mastery of HVAC, motor controls, electronics and industrial electronics. Students are also introduced to basic digital logic circuits and fiber optics theory. The combination of ECT-2030 and 2040 equates to ACE's 0004NJAT.

Note: This course is restricted to participants of the IBEW Local 26 apprenticeship program.

ECT-2050 Electrical Construction Technology, Year 5A. 3 Credits
In both classroom and field experience, students learn basic theory and demonstrate skills in the use of national electrical codes, security and fire alarm systems, sensors, instrumentation testing techniques and equipment. Students also learn theory of flow, pressure, level temperature and pneumatics. The combination of ECT-2050 and 2060 equates to ACE's 0005NJAT.

Note: This course is restricted to participants of the IBEW Local 26 apprenticeship program.

ECT-2060 Electrical Construction Technology, Year 5B. 3 Credits
In both classroom and field experience, students expand skills learned in ECT-2050 and will demonstrate mastery of national electrical codes, instrumentation and control techniques and equipment, build networking cable systems, install and inspect fire alarm systems, install security and telephone monitoring systems, use distributed power generation systems, supervise field experience in electrical construction, apply instrumentation and testing techniques and complete all NJATC examinations (written, demonstration and field competency) with a passing grade. The combination of ECT-2050 and 2060 equates to ACE's 0005NJAT.

Note: This course is restricted to participants of the IBEW Local 26 apprenticeship program.

Education (EDU)

Teacher Education Department
Marlboro Hall, Room 2011
301-322-0780 or 301-583-5250

All EDU courses may now be found under a new subject heading, Teacher Education (TED), to be found later in this chapter.

Emergency Medical Technician/Paramedic (EMT)

Allied Health Department
Lanham Hall, Room 304
301-322-0733

Note: All courses incorporate Statewide Protocols for EMT-Paramedic as applicable.

EMT-1510 Prehospital Environment. 2 Credits
Introduces the paramedic student to the roles and responsibilities central to the delivery of emergency prehospital advanced life support-level care. Includes paramedic and technical report writing, laws governing practice, psychosocial issues and ethical considerations and aspects of theprehospital EMT systems and emergency field communications. Prerequisite: EMT-B. EMT-1520, EMT-1540, EMT-1550, EMT-1570 and EMT-1590 concurrent.

EMT-1520 Medical Emergencies. 3 Credits
Provides knowledge and skills essential to advanced life support care of patients with medical emergencies. Covers cardiovascular, respiratory, nervous system, abdominal cavity, endocrinology, environmental emergencies and allergies-anaphylaxis as a physiologic base for assessment and intervention. College laboratory, computer-assisted education will be used extensively. Prerequisite: EMT-B. Program admission and departmental approval. EMT-1510, EMT-1540, EMT-1550, EMT-1570 and EMT-1590 concurrent. 2 class/2 lab hours.

EMT-1540 Advanced Airway Management. 3 Credits
Provides knowledge and skills essential to advanced life support care of patients with respiratory emergencies. Advanced techniques of airway management will be covered. College laboratory, computer-assisted education and cadaver experience will be used extensively. Prerequisite: EMT-B. EMT-1510, EMT-1520, EMT-1550, EMT-1570 and EMT-1590 concurrent. 2 class/2 lab hours.

EMT-1550 Paramedic Practice I. 2 Credits
Provides the paramedic student with an opportunity to integrate and apply knowledge and skills introduced in EMT-1510 and 1520. Precepted patient care experiences are facilitated in various settings: extended care facilities, hospital emergency departments, intensive care and surgical departments. Prerequisite: EMT-B. EMT-1510, EMT-1520, EMT-1540, EMT-1570 and EMT-1590 concurrent. 8 clinical hours/week.

EMT-1570 IV Therapy and Pharmacology. 3 Credits
Provides the paramedic student with the knowledge to be able to integrate pathophysiological principles of pharmacology and the assessment findings to formulate a field impression and implement a pharmacologic management plan. At the completion of the course the student will be able to safely and precisely access the venous circulation and administer medications. Prerequisite: EMT-B. EMT-1510, EMT-1520, EMT-1540, EMT-1570 and EMT-1590 concurrent. 2 class/2 lab hours.

EMT-1580 Shock and Trauma. 4 Credits
An in-depth study of trauma, victim rescue theory and skills and pathophysiology of shock. Includes the study of fluid and electrolyte balance and acute changes in body fluid space. Assessment and treatment of various types of shock and trauma for both the adult and pediatric patient suffering head and facial, spinal, thoracic, abdominal and musculoskeletal trauma. Prerequisite: EMT-1510, EMT-1520, EMT-1540, EMT-1550, EMT-1570, EMT-1600, EMT-1620, EMT-2000 and EMT-2510 concurrent. 3 class/2 lab hours.

EMT-1590 Medical Math for Allied Health Professionals. 2 Credits
Provides the allied health professional with a review of mathematical principles as they relate to the field of emergency medicine. At the end of the course, the student will be able to calculate correct drug dosages and prepare medications for appropriate administration. Prerequisite: EMT-B, EMT-1510, EMT-1520, EMT-1540, EMT-1550 and EMT-1570 concurrent. 2 class hours.
EMT-1600 Cardiology and EKG Interpretation. 3 Credits
An in-depth study of the pathophysiology, assessment and treatment of cardiac emergencies including basic and advanced EKG interpretation. Extensive use of laboratory and computer-assisted instruction will be emphasized. Prerequisites: EMT-1510, EMT-1520, EMT 1540, EMT-1550, EMT-1570, and EMT-1590. EMT-1580, EMT-1620, EMT-2000 and EMT-2510 concurrent. 3 class/2 lab hours.

EMT-1620 Paramedic Practice II. 3 Credits
Supervised experience is provided in the hospital and field setting correlating with knowledge, skills and techniques presented in EMT-1550, 1570 and 1590. Emphasis is placed on patient assessment, cardiac and respiratory emergencies, shock and trauma. Prerequisites: EMT-1510, EMT-1520, EMT-1540, EMT-1550, EMT 1570, and EMT-1590. EMT-1600, EMT-2000, and EMT-2510 concurrent. 12 clinical hours/week.

EMT-2000 Preparation for EMT-I Certification. 2 Credits
Provides a comprehensive review and synthesis of the knowledge base of the Emergency Medical Technician-Intermediate. Integration and application of assessment, information-gathering skills, critical thinking and decision-making will be employed through various labs, computer-assisted and scenario-based exercises. Upon completion of the course, students will be prepared to take the National Registry EMT-I written and practical exam. Prerequisites: EMT-1510, EMT-1520, EMT-1540, EMT-1550, EMT-1570 and EMT-1590 with grades of C or higher. EMT-1580, EMT-1600, EMT-1620 and EMT-2510 concurrent. 4 lab hours.

EMT-2510 Special Patient Populations and Medical Emergencies II. 3 Credits
Analysis of pediatric emergencies, environmental emergencies, substance abuse and toxicology. Obstetric and gynecological disorders are reviewed as well as the management of the expectant mother, complications of labor and normal/abnormal delivery. Prerequisites: EMT-1510, EMT-1520, EMT-1540, EMT-1550, EMT-1570 and EMT-1590. EMT-1580, EMT-1600, EMT-1620 and EMT-2510 concurrent. 2 class/2 lab hours.

EMT-2520 Medical Emergencies and Patient Assessment II. 3 Credits
Emphasizes advanced pathological concepts and principles in caring for patients experiencing medical emergencies in the prehospital environment related to respiratory, cardiac, neurological, endocrinological, allergic, gastroenterological, urological and nephrological, hematological, obstetrical and gynecological and psychiatric and behavioral issues. Lab focuses on advanced skill mastery in caring for these patients, including the continued development of critical thinking skills and the development and implementation of treatment plans for patients with various disease states encountered in the prehospital environment. Continued attention is given to preparation for a role of EMS team leader, patient advocate and for entry level practice as a paramedic professional in the prehospital environment. Prerequisite: EMT-I Certification and program admission. EMT-2530 concurrent. 2 class/2 lab hours.

EMT-2530 Paramedic Practice III. 3 Credits
Supervised experience is provided correlating knowledge and skills presented in EMT-2510. Experience will be focused on the emergency department, operating room, obstetric and pediatric units and paramedic units in the region. Prerequisites: EMT-I Certification and program admission. EMT-2520 concurrent. 16 clinical hours/week.

EMT-2540 Paramedic Practice IV. 3 Credits
Practice of comprehensive patient assessment and intervention in specialty facilities on advanced life support units. Includes a final written review examination, advanced practical skills review and mock practical exam. Final cumulative program course. Prerequisites: EMT-2520 and EMT-2530. EMT-2580 and EMT-2560 concurrent. Capstone Course: Students must have completed a minimum of 53 credits, including the prerequisite courses, prior to enrolling in this course. 16 clinical hours/week.

EMT-2560 Preparation for EMT-P Certification. 2 Credits
Provides student with a comprehensive review and synthesis of the knowledge base of the paramedic. Integration and application of assessment, information-gathering skills and decision-making will be employed through computer-assisted and scenario-based exercises. Prerequisites: EMT-2520 and EMT-2530. EMT-2580 and EMT-2540 concurrent. 4 lab hours.

EMT-2580 Study of Human Systems for Paramedics. 4 Credits
This course is a co-requisite for the EMT-Paramedic Program, following the DOT EMT-Paramedic program guidelines. It utilizes a systemic approach, beginning by formulating a basic picture of the human body then moving into more anatomic detail. Lectures and labs discuss body systems, both how they function individually and together as a unit. In addition to the overall picture of each system, this course presents the gross anatomy and the microscopic anatomy of vital structures, with special emphasis on how these structures function in diseased states during medical emergencies encountered by the paramedic in the prehospital environment. Prerequisites: EMT-2530 and EMT-2520 with C or higher. EMT-2540 and EMT-2560 concurrent. 3 class/2 lab hours.

*EMT-2580 Study of Human Systems for Paramedics. 4 Credits
This course is a co-requisite for the EMT-Paramedic Program, following the DOT EMT-Paramedic program guidelines. It utilizes a systemic approach, beginning by formulating a basic picture of the human body then moving into more anatomic detail. Lectures and labs discuss body systems, both how they function individually and together as a unit. In addition to the overall picture of each system, this course presents the gross anatomy and the microscopic anatomy of vital structures, with special emphasis on how these structures function in diseased states during medical emergencies encountered by the paramedic in the prehospital environment. Prerequisites: EMT-2530 and EMT-2520 with C or higher. EMT-2540 and EMT-2560 concurrent. 3 class/2 lab hours.

* Certificate option only. Degree option must take BIO-2050 and BIO-2060 instead.

Engineering (EGR)

Physical Sciences and Engineering Department
Chesapeake Hall, Room 100
301-522-0420

A grade of C or higher is required for any course used to satisfy a prerequisite for any other course.

EGR-1010 Introductory Engineering. 3 Credits
Introduces the student to the theory and practice of engineering. The course has four main parts, each part covering important aspects of engineering, giving the student a full picture of the career they are about to embark upon. The first part will help the student understand what an engineer is and what type of work they would be expected to perform in society. Included in this will be discussions of ethics and group dynamics. The second part will deal with higher level engineering concepts. This will be developed in an application area such as a research laboratory giving students exposure to professional practices common in all engineering disciplines. A number of professional papers will be reviewed leading to the creation of a hypothetical laboratory emphasizing the interaction common to all engineering disciplines. The third part...
will cover fundamental aspects of engineering including drawing, modeling, problem solving, design, and laboratory experimentation. Basic computer skills will be developed using MATLAB, Fortran, C, or a similar high level computer language. Finally a team project will constitute the fourth part. The teams will be expected to develop a product using a number of engineering and software skills. Teamwork, along with communication skills (oral, written, and graphical), are exercised throughout the course. Prerequisite: Reading and English proficiency. EGR-1140 with grade of C or better. MAT-1360 or MAT-1370 with grade of C or better. MAT-2410 and EGR-1010 completed or concurrent. 2 class/3 lab hours.

EGR-1140 Computer Programming for Engineers and Scientists. 2 Credits
This is a high-level introduction to computer tools and computer programming for the engineer and scientist. The goal is to develop within the student sufficient knowledge to perform analysis using common engineering and science programming languages. Topics will include algorithm analysis and solution, program structures, data structures, modular design and overviews of the computer hardware, various computer tools available to solve real world problems and object-oriented structure. A variety of languages will be introduced such as MATLAB, Fortran and C along with engineering specific languages such as Spice and VHDL. Prerequisite: MAT-1350 or higher with grade of C or better.

EGR-2030 Circuit Analysis. 3 Credits
Introduces the advanced student to the theory of circuit analysis by studying concepts using complex analysis techniques that apply to the electrical engineering, general engineering, and advanced science student alike. Examines classical analysis techniques of AC/DC circuits using Kirchhoff’s laws, mesh and nodal methods, phasor notation, superposition, the application of Thvenin’s and Norton’s theorem, etc. Other topics will include transient analysis of first- and second-order circuits, frequency response, polyphase circuits, two-port networks, amplifiers, and digital logic. Different tools to aid in the solution of circuits will be performed such as Laplace transformations, transfer functions in the solution of transient analysis, and FFTs for signal analysis. Analysis using different computer simulation techniques will be introduced for a variety of circuits to serve as a primer for more advanced courses in the junior and senior year of college. Since circuit analysis is a general concept in engineering, this course will examine throughout circuit elements (resistors, capacitors, inductors, sources, etc.) and their underlying concepts extending circuit analysis to all the different scientific and engineering fields. Prerequisites: MAT-2430, EGR-1010, and PHY-1030 with grades of C or better. MAT 2460 completed or concurrent.

EGR-2050 Introductory Numerical Methods. 3 Credits
Emphasis on case studies in a number of areas including mechanical, civil, environmental, electrical, aerospace, chemical and biological engineering in order to enhance understanding of a variety of numerical methods crucial to solving most high-level applications in engineering, physics, chemistry, and biology. Subjects to be studied include error analysis, roots of non-linear equations, systems of linear equations, eigenvalues and eigenvectors, optimization, curve fitting including splines. Fourier analysis, modeling, numerical differentiation and integration, and numerical solving of differential equations including, but not limited to, predictor-corrector methods and finite element analysis. Extensive surveys of a number of advanced subjects include digital filters, molecular dynamics, percolation, and Monte Carlo simulation methods. Some new mathematical concepts will be introduced in the class. A number of software packages and languages important to engineering are surveyed with primary emphasis on mastering one high-level language such as MATLAB, C, or Fortran. Prerequisite: EGR-1010 and MAT-2420 with grades of C or better.

EGR-2060 Thermodynamics. 3 Credits
Principles of macroscopic thermodynamics, focusing on mass transport and energy, heat and work, the properties of pure substances and mixtures, the first and second laws and reversible cycles. Prerequisites: MAT-2420 and PHY-2030.

EGR-2200 Engineering Mechanics. 3 Credits
Principles of mechanics, including points, bodies and assemblies in static equilibrium. Areas examined will include trusses, frames, beams, cables, machines, point and distributed loading and moments of inertia, scalar and vector analysis. More advanced topics will include deformable bodies and stress, strain, torsion, shear, bending, and fracture. Introduction to kinetics, kinematics, and strength of materials. (Formerly EGR 1020. Students may not receive credit for both EGR 1020 and EGR 2200.) Prerequisites: MAT-2410 and EGR-1010 with grades of C or better, PHY-1030 and MAT-2420 completed or concurrent.

EGR-2210 Advanced Engineering Mechanics I. 3 Credits
Kinematics and kinetics of particles, systems and bodies. Topics include work and energy, impulse and momentum, rigid body motion, and rotating bodies. More advanced topics will include the systems and the general theorems for systems of particles and the inertia tensor. (Formerly EGR 1010. Students may not receive credit for both EGR 1010 and EGR 2210. ) Prerequisites: EGR-1010 and EGR-2200 with grades of C or better.

EGR-2220 Advanced Engineering Mechanics II. 3 Credits
Topics in deformable bodies in axial, torsional, bending and combined loading. This course extends the introductory strength of materials to intermediate continuum mechanics. Other topics include statically indeterminate and temperature effect analysis; beam, column and pressure vessel configurations. More advanced topics include structural stability, analysis of one- and two-dimensional structures, inelastic material behavior and energy methods. (Formerly EGR 2020. Students may not receive credit for both EGR 2020 and EGR 2220.) Prerequisites: EGR-2210 and EGR-2200 with grades of C or better.

EGR-2300 Materials Science for Engineers and Scientists. 3 Credits
Introduces the foundations of the chemistry and physics of materials used in engineering applications. Develops the relationship between the atomic and molecular structure of materials and the macroscopic properties and performance of engineering material. In particular, includes thorough discussion of the chemical and physical properties of metals, ceramics, polymers, semiconductors, superconductors and nanomaterials. Prerequisites: EGR-1010 and CHM-1020.

EGR-2440 Digital Logic Design. 3 Credits
Introduction to the theory and practice of logic (digital) circuits in order to foster an understanding of modern electrical circuits. Includes but is not limited to the following subjects: Number systems and base conversions; Boolean algebra, truth tables, logic gates, etc.
EGR-2440 continues from previous page

circuits, logic circuits synthesis and implementation, Karnaugh maps (and other strategies of minimization), sequential logic, flip-flops, registers, counters, processors (simple), programmable logic devices and characteristics of logic families. Some physical hardware is discussed including limitations. This course emphasizes the elements used to create logic circuits and the software (CAD/EDA) used to design and simulate logic circuits. Prerequisites: EGR-1010, MAT-2420 and PHY-1030 with grades of C or better. PHY 203 completed or concurrent.

EGR-2450 Electronic and Digital Circuit Laboratory. 2 Credits
Introduction to basic circuit measurement techniques and laboratory equipment (DMM, analog and digital oscilloscope, power supply, function generator, Digital Logic Analyzers) including the limitations and inaccuracies inherent in any measurement device. Design, construction and performance measurement of circuits containing passive elements, digital logic circuits, transformers, diodes and operational amplifiers. In addition, simulation tools to design circuits and to analyze performance will be used extending work performed in digital logic design and circuit analysis. Knowledge of both steady state response and transient response is required for a number of experiments. Extensive analysis will be demonstrated in both laboratory books and laboratory reports. Knowledge of statistical analysis as well as other methods of analysis will be required in this class. Prerequisites: EGR-2440 with grade of C or better. EGR-2030 completed or concurrent, 2 class/3 lab hours.

EGR-2910–2930 Cooperative Education. 1–3 Credits

EGR-2990H Honors Seminar in Engineering and Science (Special Topics). 1 Credit
Seminar course that introduces and studies emerging issues in science, engineering, technology, and mathematics. Topics vary by semester. Also offered as BIO-2990H and CHM-2990H. Prerequisites: A 3.00 GPA, completion of a minimum of 18 credits in courses offered by the division of Sciences, Technology, Engineering and Mathematics, and permission of the instructor or the honors program coordinator.

Engineering Technology (ENT)

Information and Engineering Technology Department Center for Advanced Technology, Room 129 301-322-0751

ENT-1600 Introduction to CAD with AutoCAD. 3 Credits
Techniques for creating, editing and dimensioning two-dimensional CAD drawings. Prerequisite: Drafting background helpful but not required. 2 class/3 lab hours.

ENT-1640 Three-Dimensional CAD with AutoCAD. 3 Credits
Creation of three-dimensional AutoCAD drawings using wireframe models, surface models and solid models. Prerequisite: ENT-1600. 2 class/3 lab hours.

ENT-1680 Revit Architecture and BIM. 3 Credits
Students will create integrated architectural project models and document their designs with linked two-dimensional drawings using Autodesk’s Revit Architecture. Introduction to the concepts of Building Information Modeling (BIM) and the tools for parametric building design and documentation. Using Revit to produce the schematic design, construction documentation, and design visualization. No prerequisites, but architecture or drafting background helpful. 2 class/3 lab hours.

ENT-1710 Circuits and Measurement Techniques. 3 Credits
Analysis of linear electronic circuits and systems. Includes network theorems and hands-on use of electronic test equipment. Prerequisites: MAT-0104 or MAT-1340, completed or concurrent. 1 class/1 recitation/5 lab hours (open-lab format).

ENT-1720 Circuit Analysis and Design. 3 Credits
Analysis and design of reactive circuits, including use of phasor and j-operator techniques. Covers capacitors, inductors, transformers and filters and use of electronic instrumentation. Prerequisites: ENT-1710; MAT-0104 or MAT-1340 or higher, completed or concurrent. 1 class/1 recitation/5 lab hours (open-lab format).

ENT-1770 Introduction to Computing for Technology. 3 Credits
Introduction to operating systems, such as Linux and Windows; introduction to a high-level programming language, such as Visual Basic; introduction to a graphical and data acquisition language, such as LabVIEW. Prerequisite: ENT-1710 completed or concurrent or permission of department chair. 2 class/3 lab hours.

ENT-1780 Analog Circuits. 4 Credits
Diodes, transistors, simple amplifiers, power supplies, operational amplifiers and integrated circuits. Prerequisites: ENT-1710 completed and MAT-1340 or higher, completed or concurrent. 3 class/3 lab hours.

ENT-1800 Digital Circuits. 4 Credits
Digital circuits from simple gates to complex gate arrays (FPGA). Encoders, multiplexers, adders, counters and flip-flops. Number systems, Boolean algebra and combinatorial logic. (Formerly ENT 274; students may not receive credit for both ENT-1800 and ENT 274.) Prerequisite: ENT-1710, completed or concurrent. 3 class/3 lab hours.

ENT-1830 Fiber Optics. 3 Credits
Basic principles of fiber optics and data transmission using lasers and photodiodes. Current state-of-the-art GHz transceivers and their noise measurements and their use in fiber optic network systems. Prerequisite: ENT 274 or ENT-1800. 2 class/1 lab hour.

ENT-1840 Introduction to Personal Computer Hardware. 3 Credits
See INT-1540 Computer Hardware I: A+ Preparation.

ENT-1850 Circuit Evaluation and Repair. 2 Credits
Reverse engineering from circuit to schematic, troubleshooting techniques, test equipment and assembly techniques. Prerequisite: ENT-1710. 1 class/3 lab hours (open-lab format).

ENT-1860 Fundamentals of Quality Assurance. 3 Credits
Fundamental principles, tools and application of quality assurance (QA). Extensive utilization of case studies and personalized
implementation of QA to product, job and business. Prerequisite: MAT-1340 or higher, completed or concurrent or permission of department chair. 3 class hours.

**ENT-1880 Personal Computer Configuration and Assembly. 1 Credit**
See INT-1560 Personal Computer Configuration and Assembly

**ENT-1890 Network Hardware. 3 Credits**
See INT-1550 Introduction to Networks: Network+ Preparation

**ENT-1900 Introduction to Space Technology. 3 Credits**
Satellite technology, reliability and testing. Includes propulsion and launch systems, spacecraft structures, power systems, telemetry, tracking and command/control/communication operations. Prerequisites: MAT-0104 or MAT-1340 or higher, completed or concurrent or permission of department chair.

**ENT-1920 Quality Management: Engineering Process. 3 Credits**
Principles of quality management applied to engineering processes: leadership, customer and supplier focus, quality measurements and metrics, quality tools, benchmarking, QFD and continuous quality improvement. Principles reinforced with practical case studies. 3 class hours.

**ENT-1940 Router Technology I: Network Fundamentals.**
See INT-1450 CCNA 1: Network Fundamentals

**ENT-1950 Router Technology II: Routing Protocols. 4 Credits**
See INT-1460 CCNA 2: Routing Protocols.

**ENT-1960 Router Technology III: LAN Switching and Wireless. 4 Credits**
See INT-2450 CCNA 3: LAN Switching and Wireless

**ENT-1970 Router Technology IV: Wide Area Networks. 4 Credits**
See INT-2460 CCNA 4: Accessing the WAN

**ENT-2010 Configuration Management and Project Integrity. 3 Credits**
Configuration Management (CM) principles and implementation, project integrity assurance and the ISO-9000 quality standard CM requirements. Hardware, software and firmware applications illustrated by a comprehensive case study. 3 class hours.

**ENT-2020 Quality Improvement Techniques. 3 Credits**
Six-sigma quality improvement: tools, statistical methods, process mapping, performance goals, metrics, capability analysis, "greenbelt and blackbelt" teams and implementation. Case studies and applications to product, job and business. Prerequisite: MAT-1140. 3 class hours.

**ENT-2190 Wireless LANs. 3 Credits**
(CyberWatch common course equivalent: CW 245)
Principles of wireless communications, protocols and standards used to build, configure, secure and troubleshoot WLANs. Covers basic and extended WLANs (BSS, IBSS and ESS) Preparation for CWNA certification. Prerequisite: ENT-1890 or ENT-1940 completed. ENT-2730 recommended but not required. 2 class/2 lab hours.

**ENT-2200 High-Reliability Soldering and Fabrication. 2 Credits**
Hands-on application of industry standards to hand soldering of components to connectors and both through-hole and surface-mount circuit boards. Includes relevant standards, safety and ESD requirements, and inspection techniques. Students who successfully complete the course are eligible for IPC J-STD 001 certification. Prerequisite: ENT-1710 or permission of department chair. 1 class/2 lab hours.

**ENT-2560 Computer-Aided Electronic Design. 2 Credits**
Use of standard software packages such as PSpice and OrCAD to draw schematics, analyze circuits and design printed circuit boards. Prerequisites: ENT-1780, ENT-1800 or ENT-274. 1 class/3 lab hours.

**ENT-2660 Customizing AutoCAD. 3 Credits**
Customizing and maximizing AutoCAD via macros, scripts and slides. Students will create their own menus, icons and dialog boxes. Introduction to AutoLISP. Prerequisite: ENT-1600. 2 class/3 lab hours.

**ENT-2680 CAD Portfolio Development. 3 Credits**
Students, working individually or in teams, will create a set of CAD drawings using techniques learned in earlier CAD courses. Prerequisite: ENT-1600. Individual-study course equivalent to 2 class/ 3 lab hours.

**ENT-2730 Electronic Communication. 4 Credits**
AM, FM and SSB circuits using oscillators, modulators, audio/RF amplifiers, mixers and detectors. Prerequisites: ENT-1780; and MAT-1340 or higher, completed or concurrent. 3 class/3 lab hours.

**ENT-2810 CPU Architecture. 4 Credits**
Architecture and operation of the central processing unit (CPU) using 8- and 16-bit machines. Machine and assembly language programming. Prerequisites: ENT-1770 and ENT-1800 or ENT-274. 3 class/3 lab hours.

**ENT-2830 Telecommunications. 3 Credits**
See INT-2530 Telecommunications.

**ENT-2840 Computer Repair. 4 Credits**
See INT-2540 Computer Hardware II: A+ Preparation

**ENT-2860 Advanced PC Configuration and Repair. 4 Credits**
See INT-2560 Advanced PC Configuration and Repair

**ENT-2900 Systems Analysis Project. 3 Credits**
Working individually or in teams, students will use standard design and troubleshooting methodologies to complete a major project in an area of their choosing. The project will include either design, fabrication, testing of a new system or troubleshooting and repair of an existing system, along with written reports and oral presentations. Prerequisite: ENT-1780 or ENT-1890 or ENT-2810 or ENT-2840. **Capstone Course:** Students must complete a minimum of 46 credits, including any prerequisite courses, prior to enrolling in this course. A minimum cumulative GPA of 2.00 or better is also required. 3 class/3 lab hours.

**ENT-2960–2980 Cooperative Education. 1–3 Credits**
English Department
Marlboro Hall, Room 3078
301-322-0561

EGL-0100 Introduction to Composition. 0 Credits (4 EH)
Preparation for EGL-1010. Grammar and punctuation, sentence construction, paragraph development and short essay writing. Prerequisite: Reading and writing proficiency. May be taken concurrently with DVR-0061. (Formerly offered as EGL-1000. Students who have successfully completed EGL-1000 may not take EGL-0100.) Not open to students who have completed EGL-1010. 4 class hours.

EGL-1010 Composition I: Expository Writing. 3 Credits
Expository writing, including required essays and a research paper. Prerequisite: Reading and writing proficiency or C grade or higher in EGL-1000 or ESL-2020 or a grade of D in EGL-1000 with acceptable writing sample. (Honors version available.)

EGL-1011 Composition I: Expository Writing
(Accelerated Learning Program). 3 Credits
Special version of university-parallel freshman English. Fundamentals of effective prose writing, including required essays and a research paper. Co-requisites: EGL-1011 required; DVR-0061 recommended.

EGL-1010 Composition I: Expository Writing
(Accelerated Learning Program). 3 Credits
Special version of university-parallel freshman English. Fundamentals of effective prose writing, including required essays and a research paper. Course is offered to Accelerated Learning Program (ALP) students only. Corequisite: EGL-1010

EGL-1020 Composition II: Writing about Literature. 3 Credits
Second semester composition using literature as the subject for discussion and writing. Study various kinds of literature (e.g., drama, poetry, short story). EGL-1100, EGL-1320 or EGL-1340 also will fulfill the Composition II requirement. Prerequisite: EGL-1010 with a grade of C or higher. (Honors version available.)

EGL-1030 Media Writing. 3 Credits
History of mass media; study and writing of news articles, editorials, columns, reviews, radio and television scripts. Prerequisite: EGL-1010 (with a grade of C or higher or permission of instructor).

EGL-1100 Composition II: Writing about Issues and Ideas. 3 Credits
Second semester composition. Reading, analyzing and writing about contemporary issues, demonstrating clear reasoning and persuasive writing skills. EGL-1020, EGL-1320 or EGL-1340 also will fulfill the Composition II requirement. Prerequisite: EGL-1010 with a grade of C or higher. (Honors version available.)

EGL-1120 Composition II: Writing for Business. 3 Credits
Second semester composition. Students develop and sharpen critical thinking and writing skills, applying them to materials from business and the professions with an emphasis on evidence-based analysis, evaluation, interpretation and persuasive presentation. EGL-1020, EGL-1100 or EGL-1340 also will fulfill the Composition II requirement. Prerequisite: EGL-1010 with a grade of C or higher.

EGL-1140 Composition II: Writing About Technical Topics. 3 Credits
Second semester composition. Includes preparation of various types of technical, business, government and scientific communications, including resumes; progress, examination and recommendation reports; proposals; and memoranda. EGL-1020, EGL-1100 or EGL-1320 also will fulfill the Composition II requirement. Prerequisite: EGL-1010 with a grade of C or higher.

EGL-1360 Principles of Editing. 3 Credits
Practice in editing manuscripts and evaluating publication formats. Prerequisite: EGL-1010.

EGL-2010 British Literature from the Anglo-Saxon Period through the 18th Century. 3 Credits
British literature to around 1800 and its historical and cultural background. Prerequisite: EGL-1020 or EGL-1100 or EGL-1320 or EGL-1340. (Offered every other year.)

EGL-2030 British Literature of the 19th and 20th Centuries. 3 Credits
British literature from the Romantic period to modern times and its historical and cultural background. Prerequisite: EGL-1020 or EGL-1100 or EGL-1320 or EGL-1340. (Offered every other year.)

EGL-2050 American Literature from the Beginnings to the Late 19th Century. 3 Credits
American literature from the colonial period to the Civil War and its social and intellectual background. Prerequisite: EGL-1020 or EGL-1100 or EGL-1320 or EGL-1340. (Offered every other year.)

EGL-2070 American Literature from the Late 19th Century to the Present. 3 Credits
American literature from the Civil War to the present and its social and intellectual background. Prerequisite: EGL-1020 or EGL-1100 or EGL-1320 or EGL-1340.

EGL-2090 World Literature from Ancient Times through the Middle Ages. 3 Credits
Study of world literary masterpieces from ancient times through the medieval period. Prerequisite: EGL-1020 or EGL-1100 or EGL-1320 or EGL-1340. (Offered every other year.)

EGL-2110 World Literature from the Renaissance to the Present. 3 Credits
Contemporary world literature in English from England and America and other countries such as Africa, India, France and the Caribbean. Prerequisite: EGL-1020 or EGL-1100 or EGL-1320 or EGL-1340. (Offered every other year.)

EGL-2120 Introduction to African Literature. 3 Credits
A general introduction to the oral and written literatures of Africa, with emphasis on their formal and aesthetic properties and their
sociopolitical, cultural and linguistic significance for contemporary African societies, as well as the literature's place within the canon of literature of the African diaspora. Prerequisite: EGL-1020 or EGL-1100 or EGL-1320 or EGL-1340.

EGL-2130 African-American Literature Pre-1800 to 1920. 3 Credits
Study of African-American folk tradition and literature from pre-1800s to 1920. Prerequisite: EGL-1020 or EGL-1100 or EGL-1320 or EGL-1340.

EGL-2140 African-American Literature from 1920 to the Present. 3 Credits
A study of African-American literature from the early 1900s to the present. Prerequisite: EGL-1020 or EGL-1100 or EGL-1320 or EGL-1340.

EGL-2150 Introduction to Creative Writing. 3 Credits
Techniques of writing fiction, poetry and plays with critique of student work. Prerequisite: EGL-1010.

EGL-2160 Advanced Creative Writing. 3 Credits
An intensive, genre-specific workshop which aims to further the philosophies, issues and possibilities of craft explored in its predecessor, EGL-2150. This course will encourage the serious creative writing student to pursue more sophisticated and complex expression in a selected genre (fiction, poetry or drama). Although the course will contain reading and analysis of contemporary authors, the focus will be on the creation of original work with constructive feedback from peers considered during the revision process. Prerequisites: EGL-1020 or EGL-1100 or EGL-1320 or EGL-1340; and EGL-2150 or permission of instructor.

EGL-2170 Major American Writers. 3 Credits
Study of major American writers, selected each semester from among: Poe and Hawthorne, Fitzgerald and Hemingway, Thoreau and Twain, Hughes and Wright and Toni Morrison and Zora Neale Hurston. Prerequisite: EGL-1020 or EGL-1100 or EGL-1320 or EGL-1340. (Offered every other year.)

EGL-2210 The Shakespeare Plays. 3 Credits
Introduction to the drama of Shakespeare using text and videos. Prerequisite: EGL-1020 or EGL-1100 or EGL-1320 or EGL-1340.

EGL-2230 Children's Literature. 3 Credits
Study of various genres in children's literature with focus on analysis of the content and quality of works from nursery level through the elementary grades. Prerequisite: EGL-1020 or EGL-1100 or EGL-1320 or EGL-1340.

EGL-2250 Literature for Teenagers. 3 Credits
Analysis of the content and quality of literature written for adolescents. Prerequisite: EGL-1020 or EGL-1100 or EGL-1320 or EGL-1340. (Offered every other year.)

EGL-2270 Applied Grammar. 3 Credits
Analysis of grammar, syntax, the history of the English language and conventional usage. Application of principles through editing texts, constructing teaching units and/or writing research papers. Formerly EGL 121. Students may not receive credit for both EGL-121 and EGL-2270. Prerequisites: EGL-1010; and EGL-1020, EGL-1100, EGL-1320, or EGL-1340 with grades of C or better or permission of the instructor.

EGL-2280 Literature and Film. 3 Credits
A study of the various relationships between film and literature, examining such themes as self and society as well as relevant cinematic and literary techniques. Prerequisite: EGL-1020 or EGL-1100 or EGL-1320 or EGL-1340. (Honors version available.)

EGL-2330 Modern Literature. 3 Credits
Major writers, their themes and their views of the modern world. Prerequisite: EGL-1020 or EGL-1100 or EGL-1320 or EGL-1340. (Offered every other year.)

EGL-2370 Studies in Biblical Literature: The Old Testament. 3 Credits
Analysis of the Bible as literature, emphasizing major ideas, characters, themes and literary techniques of the Old Testament. Prerequisite: EGL-1020 or EGL-1100 or EGL-1320 or EGL-1340.

EGL-2390 Studies in Biblical Literature: The New Testament. 3 Credits
Analysis of the Bible as literature, emphasizing major ideas, characters, themes and literary techniques of the New Testament. Prerequisite: EGL-1020 or EGL-1100 or EGL-1320 or EGL-1340.

EGL-2410 Mythology, Legend and Folklore. 3 Credits
Overview of myth, legend and folklore, tracing themes and motifs common to Western and other literatures. Prerequisite: EGL-1020 or EGL-1100 or EGL-1320 or EGL-1340.

EGL-2430 Survey of Science Fiction. 3 Credits
European and American science fiction with emphasis on history, themes, forms and relationship to Western culture and literature. Prerequisite: EGL-1020 or EGL-1100 or EGL-1320 or EGL-1340.

EGL-2440 Survey of Mystery and Detective Fiction. 3 Credits
Study of the literary genre of mystery and detective fiction, presenting an historical overview of the genre from its 19th century beginnings through the "golden age" of the early 20th century and the "hard boiled" detectives of the 1930s to contemporary writers as well as ethnic, regional and international authors. Students will read the fiction and also view selected films, analyzing the elements of mystery, its literary roots and its reflection of cultural contexts and issues. Prerequisite: EGL-1020 or EGL-1100 or EGL-1320 or EGL-1340. (Offered every other year.)

EGL-2450 Survey of Mystery and Detective Fiction. 3 Credits
Study of the literary genre of mystery and detective fiction, presenting an historical overview of the genre from its 19th century beginnings through the "golden age" of the early 20th century and the "hard boiled" detectives of the 1930s to contemporary writers as well as ethnic, regional and international authors. Students will read the fiction and also view selected films, analyzing the elements of mystery, its literary roots and its reflection of cultural contexts and issues. Prerequisite: EGL-1020 or EGL-1100 or EGL-1320 or EGL-1340. (Offered every other year.)

EGL-2500 Women in Literature. 3 Credits
Women's voices over the centuries expressed autobiographically and in short stories, plays and poems. Prerequisite: EGL-1020 or EGL-1100 or EGL-1320 or EGL-1340. (Offered every other year.)
EGL-2600 Introduction to the Novel. 3 Credits
An overview of the history, development, and form of the novel. This course examines novels from a variety of cultures, ranging from the genre’s inception to the present, using introductory literary theory to better understand these works and their historical, cultural, and literary contexts. Prerequisite: EGL-1020 or EGL-1100 or EGL-1320 or EGL-1340.

EGL-2890H Honors Colloquium in English. 3 Credits
This honors colloquium will examine special topics in the field of English and their relevance across disciplinary perspectives. The issues to be addressed in each colloquium will vary from semester to semester. These courses are designed for students in the Honors program, but are open to others with the approval of the honors coordinator or the instructor. Prerequisites: Reading proficiency and permission of instructor or honors coordinator.

EGL-2910–2930 Cooperative Education. 1–3 Credits

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**English as a Second Language (ESL)**

Language Studies Department
Bladen Hall, Room 309
301-322-0946

All ESL courses meet for 3 class hours and 1 additional lab hour per week or equivalent. All courses award Equivalent Hours (EHs) upon successful completion.

EGL-0081 English as a Second Language: Basic Reading Skills. 0 Credits (3 EH)
For nonnative speakers of English whose reading ability is minimal. Develops vocabulary and basic reading comprehension. Placement by exam. (Formerly offered as ESL-0811. Students may not receive credit for both ESL-0811 and ESL-0081.)

EGL-0082 English as a Second Language: Elementary I. 0 Credits (3 EH)
For nonnative speakers whose English writing and speaking skills are minimal. Elementary grammar and English structures through writing and speaking. Placement by exam. (Formerly offered as ESL-0821. Students may not receive credit for both ESL-0821 and ESL-0082.)

EGL-0100 English as a Second Language: Elementary II. 0 Credits (3 EH)
For nonnative speakers whose English writing and speaking skills are limited. Practice in basic American English grammar and writing. (Formerly ESL-1000. Students who completed ESL-1000 May not take ESL-0100.) Prerequisite: ESL-0082 (formerly ESL-0821) with a grade of C or higher or placement by exam.

EGL-0101 English as a Second Language: Intermediate I. 0 Credits (3 EH)
For nonnative speakers whose writing and speaking skills are limited. Practice in low intermediate American English grammar, sentence structure and paragraph writing. (Formerly ESL-1010. Students who have completed ESL-1010 may not take ESL-0101.) Prerequisite: ESL-0100 (formerly ESL-1000) with a grade of C or higher or placement by exam.

EGL-0102 English as a Second Language: Intermediate II. 0 Credits (3 EH)
For nonnative speakers whose writing and speaking skills are at the intermediate level. Practice in higher intermediate American English grammar, sentence structure and paragraph writing. (Formerly offered as ESL-1020. Students who have completed ESL-1020 may not take ESL-0102.) Prerequisite: ESL-0101 or 1010 with a grade of C or higher or placement by exam.

EGL-0105 English as a Second Language: Intermediate Reading Skills. 0 Credits (3 EH)
Acquainting nonnative speakers with American culture and idiomatic American English through reading and vocabulary development. (Formerly offered as ESL-1050. Students who have completed ESL-1050 may not take ESL-0105. Prerequisite: ESL-0081 and ESL 0100 (formerly ESL-0811 and ESL-1000) with grades of C or higher or placement by exam.

EGL-0106 English as a Second Language: Advanced Reading Skills. 0 Credits (3 EH)
Continuation of ESL-0105. Focus on reading, word and study skills, vocabulary expansion and summary writing. (Formerly offered as ESL-1060. Students who have completed ESL-1060 may not take ESL-0106.) Prerequisites: ESL-0102 or ESL-1020 with a grade of C or higher and ESL-0105 (formerly ESL-1050) with a grade of C or higher or placement by exam. Successful completion of ESL-0106 fulfills the college’s reading proficiency requirement.

EGL-0201 English as a Second Language: Composition. 0 Credits (3 EH)
For nonnative speakers who have a good command of English. Focus on paragraph-length compositions and complex grammar and sentence structures. (Formerly offered as ESL-2010. Students who have completed ESL-2010 may not take ESL-0201.) Prerequisite: ESL-0102 (formerly ESL-1020) with a grade of C or higher or placement by exam.

EGL-0202 English as a Second Language: Advanced Composition. 0 Credits (3 EH)
For nonnative speakers whose writing and speaking skills are at a high level. Focus on essay writing and advanced grammar. (Formerly offered as ESL-2020. Students who have completed ESL-2020 may not take ESL-0202.) Prerequisite: ESL-0201 (formerly ESL-2010) with a grade of C or higher or placement by exam.

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**Forensic Science (FOS)**

Public Safety and Law Department
Bladen Hall, Room 208
301-322-0553

FOS-2500 Forensic Science. 3 Credits
An introduction to the scientific discipline directed at the recognition, identification and evaluation of physical evidence through application of the natural sciences to criminal investigation.
Emphasis is placed on the role of the forensic scientist. (Formerly FOS-101. Students may not receive credit for both FOS-101 and FOS-2500.) Prerequisite: Reading proficiency.

FOS-2510 Forensic Aspects of Death Investigation. 3 Credits
A medicolegal examination of death from mutual cooperation between the medical examiner and the homicide investigator. (Formerly FOS-151. Students may not receive credit for both FOS-151 and FOS-2510.) Prerequisites: FOS-2500. (Online version offered only in the fall semester.)

FOS-2520 Forensic Aspects of Drug Identification and Abuse. 3 Credits
An understanding of the nature of poisoning, the pharmacokinetics of drug interaction on brain neurochemistry and other organ systems in the human body. This course is an overview of how the human cravings for illicit and licit drugs affect human behavior. (Formerly FOS-152. Students may not receive credit for both FOS-152 and FOS-2520.) Prerequisite: FOS-2500. (Online and evening sections offered spring semester only.)

FOS-2530 Fire and Arson Investigation. 3 Credits
A study of the standards or guidelines for proper fire scene investigation. (Formerly FOS-153. Students may not receive credit for both FOS-153 and FOS-2530.) Prerequisite: FOS-2500. (Offered spring semester only.)

FOS-2540 Physical Identifiers (Fingerprinting Techniques). 3 Credits
An examination and application of the science of fingerprints, using current methods of detection, development and preservation. This course also will examine basic fingerprint identification theory, processing techniques and the fingerprint identification role within forensic science. (Formerly FOS-154. Students may not receive credit for both FOS-154 and FOS-2540.) Prerequisite: FOS-2500. (Offered fall semester only.)

FOS-2550 Photography in the Forensic Sciences. 3 Credits
An introduction to the use of digital photography in the documentation of evidence associated with crime scenes. (Formerly FOS-155. Students may not receive credit for both FOS-155 and FOS-2550.) Prerequisite: FOS-2500.

FOS-2570 Firearms and Tool Marks Identification. 3 Credits
A study of firearms identification, ballistics, shot and powder patterns, cartridge casings and tool marks. (Formerly FOS-157. Students may not receive credit for both FOS-157 and FOS-2570.) Prerequisite: FOS-2500. (Offered fall semester only.)

FOS-2580 Basic Accident Investigation. 3 Credits
An understanding of the latest methods of conducting traffic accident investigations. (Formerly FOS-158. Students may not receive credit for both FOS-158 and FOS-2580.) Prerequisite: FOS-2500. (Offered spring semester only.)

FOS-2590 Crime Scene Investigation. 3 Credits
A practical hands-on approach to evidence identification, documentation, collection and handling from the crime scene to the crime laboratory to presentation in court. A fixed lens 35 mm camera or digital camera is required by the student. (Formerly FOS-159. Students may not receive credit for both FOS-159 and FOS-2590.) Prerequisite: FOS-2500.

FOS-2600 Computer Forensics I. 3 Credits
(CyberWatch common course equivalent: CW 170)
The investigation of computer-related crime, such as threatening e-mail, child pornography and Internet-related crimes. (Formerly FOS-160.) Students may not receive credit for both FOS-160 and FOS-2600. Prerequisites: INT-1010. FOS-2500 recommended.

FOS-2610 Computer Forensics II. 3 Credits
An examination of advanced concepts in computer forensic analysis and computer-related crime, including data hiding techniques, encryption, electronic password cracking and password recovery tools. Prerequisite: FOS-2600. 2 class/2 lab hours.

FOS-2910–2930 FOS Internship. 1–3 Credits
The internship is a practicum with measurable learning objectives designed to broaden the educational experience. Students are assigned to appropriate governmental and private agencies. 3–9 practicum hours.

French (FRN)

Language Studies Department
Bladen Hall, Room 309
301-322-0946

All French courses meet for 3 class hours and 1 additional lab hour per week or equivalent.

FRN-1010 French for Beginners. 3 Credits
H
Introduction to the language (reading, writing, understanding and speaking) and to the culture of France and Francophone countries.

FRN-1020 French for Advanced Beginners. 3 Credits
H
Continued development of French language skills and cross-cultural understanding begun in FRN-1010. Prerequisite: FRN-1010 or two years of high school French or equivalent.

FRN-2010 Intermediate French I. 3 Credits
H
Intermediate study of the French language and Francophone culture, building on the foundation of French for Beginners. Prerequisite: FRN-1020 or three years of high school French or equivalent.

FRN-2020 Intermediate French II. 3 Credits
H
Continuation of FRN-2010 with emphasis on the culture of France and other Francophone countries. Prerequisite: FRN-2010 or four years of high school French or equivalent.

FRN-2040 Advanced Conversation. 3 Credits
H
Advanced preparation for students who wish to develop fluency and confidence in speaking French. Prerequisite: FRN-2010 or four years of high school French or equivalent.
Fire Science (FSC)

Public Safety and Law Department
Bladen Hall, Room 208
301-322-0553

Fire Science (FSC) courses are taught by the Maryland Fire and Rescue Institute (MFRI) at various locations within the state of Maryland and are restricted to employees and volunteers of the Fire/EMS Department. Credits for the MFRI courses will be transferred into the college based upon the recommendation of the American Council of Education (ACE) as published in the current edition of the National Guide to Educational Credit for Training Programs.

FSC-1010 Firefighter I. 3 Credits
Provides students with the knowledge and skills to perform basic firefighting operations as part of a firefighting team. Restricted to employees and volunteers of the Fire/EMS Department.

FSC-1020 Emergency Medical Technician Basic. 6 Credits
Provides students with the necessary knowledge and skills to perform emergency medical care in a pre-hospital environment at the basic life support level. Restricted to employees and volunteers of the Fire/EMS Department.

FSC-1030 Hazardous Materials Operations. 1 Credit
Provides the student with the knowledge and skills to perform hazardous materials first response. Restricted to employees and volunteers of the Fire/EMS Department.

FSC-1200 Principles of Building Construction (Combustible). 1 Credit
Provides knowledge about the classification system of buildings; the importance of fire resistance for structural support elements and the risks associated with performing fire-suppression activities inside and around buildings involved in fire. Restricted to employees and volunteers of the Fire/EMS Department.

FSC-1210 Principles of Building Construction (Non-Combustible). 1 Credit
Enables students to cite key features of non-combustible or fire-resistant buildings which affect emergency operations. Fire and safety concerns that exist in non-combustible and fire-resistant structures are studied. Restricted to employees and volunteers of the Fire/EMS Department.

FSC-1300 Emergency Vehicle Operator. 2 Credits
Provides students with information on sensible and safe emergency vehicle driving procedures and collision avoidance and will develop basic skills in the operation of fire and rescue service apparatus. Restricted to employees and volunteers of the Fire/EMS Department.

FSC-2010 Firefighter II. 2 Credits
Provides students with the knowledge and skills needed to become a journeyman firefighter. Restricted to employees and volunteers of the Fire/EMS Department. Prerequisite: FSC-1010.

FSC-2020 Truck Company Fireground Operations. 1 Credit
Provides the student with the fundamental principles of truck company operations and how they are integrated during fireground operations. Restricted to employees and volunteers of the Fire/EMS Department. Prerequisite: FSC-1010.

FSC-2060 Firefighter Survival and Rescue. 1 Credit
Provides students with the knowledge and skills needed to prevent death or injury by addressing concerns when operating on structural fires. Restricted to employees and volunteers of the Fire/EMS Department. Prerequisite: FSC-1010.

FSC-2910–2930 Fire Science Internships. 1–3 Credits
The internship is a practicum with measurable learning objectives designed to broaden the educational experience. Restricted to employees and volunteers of the Fire/EMS Department.

Geography (GEO)

History, Political Science, Geography, and Anthropology Department
Marlboro Hall, Room 3078
301-322-0561

GEO-1000 Introduction to Geography as a Social Science. 3 Credits
SS
The impact of human behavior on cultural and natural landscapes from a social science perspective. Prerequisite: Reading proficiency.

GEO-1010 Physical Geography. 3 Credits
SS Sc
Study of nature’s environment including the basic systems of the atmosphere, hydrosphere and lithosphere and how they interact. Prerequisite: Reading proficiency.

GEO-1020 Physical Geography Laboratory. 1 Credit
Sc
Laboratory work complementary to theories and principles of GEO-1010. Climate, the biosphere and the earth’s landforms. Prerequisites: GEO-1010 completed or concurrent and Reading proficiency. 3 lab hours.

GEO-1070 Physical and Historical Geography of Maryland. 3 Credits
Historical and natural evolution of landscapes in Maryland. Field trips to Baltimore and other Maryland locations. Prerequisite: Reading proficiency. (Offered fall semester only)

GEO-1090 World Regional Geography. 3 Credits
Nations as components of regional environments. Politics, economics and ecology in the developed and developing worlds. Prerequisite: Reading proficiency. (Offered spring semester only)

Health Education (HLE)

Health, Nutrition, and Physical Education Department
Novak Field House, Room 104
301-322-0504

HLE-1150 Personal and Community Health. 3 Credits
Provides health information related to personal and community health. Topics include but are not limited to: wellness, relationships
and communications, sexuality and reproduction, substance abuse, physical fitness and nutrition, diseases, conventional and complementary medicine, and death and dying.

HLE-2000 Application of Concepts for Fitness and Wellness. 3 Credits
Includes the study and practical application of principles for optimizing wellness, including health, fitness, nutrition, weight control and stress management. Individual fitness, nutrition and wellness will be evaluated and implemented through the use of labs, self-assessment tools, weight training and cardiorespiratory activities.

HLE-2010 Health Issues in a Culturally Diverse Society. 3 Credits
Provides health information related to issues and problems affecting ethnic minorities in the United States (African American, Hispanic American, Asian American and Native American). Focus areas will include traditional health care, disparities in treatment, barriers in health care, culture and nutrition, leading causes of death, healing and religion, current health problems. Prerequisite: Reading proficiency.

HLE-2130 First Aid—Responding to Emergencies/CPR FPR. 3 Credits
Studies emergency care theory and skills including all CPR skills and AED (defibrillation) instruction for the professional rescuer. Two Red Cross certifications awarded: First Aid—Responding to Emergencies and CPR for the Professional Rescuer.

HLE-2150 Introduction to Child Health. 3 Credits
Examines health, safety and nutritional needs of children between birth and eight years old and the role of the early childhood educator in promoting children's health. Includes developing activities designed to teach children healthy living habits. Red Cross Community First Aid and Safety and CPR certificates awarded. Prerequisite: TED-1200 (formerly ECE-1510).

HLE-2210 Human Sexuality. 3 Credits
Comprehensive study of the biological, physiological, developmental and social aspects of human sexuality from a multicultural perspective. Topics include male/female sexual physiology and response cycles, gender issues, contraception and abortion, conception/fertility issues, relationship sexuality, sexually transmitted infections, sexual dysfunction and treatment and sexual harassment and coercion issues.

HLE-2250 Health Issues for Women. 3 Credits
Examines a broad range of health issues that are unique to women or of special importance to women, including eating disorders, abuse and rape, self-esteem related to appearance and reproductive technology.

HLE-2300 Integrated Health and Physical Education. 3 Credits
This course focuses on foundational knowledge about the interrelationship of behavior and health. It incorporates the concepts of movement to learning development of motor skills and concepts of leading a healthy lifestyle.

HLE-2890H Honors Colloquium in Health Education. 3 Credits
This honors colloquium will examine special topics in the field of health education and their relevance across disciplinary perspectives. The issues to be addressed in each colloquium will vary from semester to semester. These courses are designed for students in the Honors program but are open to others with the approval of the honors coordinator or the instructor. Prerequisites: Reading proficiency and permission of instructor/COORDINATOR.

### Health Information Management (HIM)

**Allied Health Department**
Lanham Hall, Room 304
301-322-0733

HIM courses are offered once per year in the fall or spring except for HIM-1530 which is offered every semester. A grade of C or higher must be maintained in all core program and required science courses. Program prerequisites require a C or higher.

HIM-1500 Fundamentals of Health Information. 4 Credits
Organization of health care delivery; the health information management profession; emphasis on health record content, technology, the accrediting/regulatory standards, retention, storage/retrieval systems, and the legal aspects of releasing health information. Prerequisites: Program admission, INT-1010, BIO-1010 BIO-2050; HIM-1530 and BIO-2060 completed or concurrent. 3 class/3 lab hours. (Offered fall only.)

HIM-1530 Medical Terminology. 4 Credits
Usage, pronunciation, spelling and plural formation as they relate to body systems. Emphasis is on roots, prefixes, suffixes, eponyms, standard abbreviations, the use of medical terms in context and terminology related to cancer medicine, nuclear medicine and pharmacology.

HIM-1540 Directed Clinical Practice I. 1 Credit
Supervised student practice in simulated laboratory and clinical practice settings; emphasis on storage and retrieval systems, MPI, incomplete documentation policies and procedures and release of health information and the associated computer applications. Prerequisite: HIM-1500. 4 clinical hours. (Offered spring only.)

HIM-1550 Disease Processes. 4 Credits
Basic concepts of health and disease; causes, etiology, incidence and treatment of illnesses. Prerequisites: HIM-1530 and BIO-2050/2060. (Offered spring only.)

HIM-1581 Principles and Applications of ICD Coding. 4 Credits
In-depth focus on diagnosis and procedural coding using the International Classification of Diseases (ICD) as modified for use in the United States. UHDDS data collection requirements for financial reporting and statistical research. (Formerly offered as HIM-1580. Students may not receive credit for both HIM-1580 and HIM-1581.) Prerequisites: HIM-1500, HIM-1530 and BIO-2050/2060; HIM-1550 completed or concurrent or permission of program director. 3 class/3 lab hours. (Offered spring only.)

HIM-1600 Principles and Applications of CPT. 2 Credits
Orientation to the coding principles of HCPCS/CPT. Special empha-
HIM-1600 continues from previous page

sis on application in the ambulatory and acute care environments. Prerequisites: HIM-1580 and HIM-1550 or permission of program director. 2 class/1 lab hours. (Offered summer only.)

HIM-1800 Introduction to Medical Terms for Health Professionals. 1 Credit
Introduces basic medical terminology to students preparing to enter a health care profession. Students will learn word elements, build on and properly use medical language, thus enhancing their communication skills in the didactic and clinical settings. (HIM majors may not take this course. This course cannot substitute for HIM-1530.) Formerly MHE-2000. Students cannot receive credit for both MHE-2000 and HIM-1800.

Note: This is a self-directed course using CD-ROM and e-mail communication.

HIM-1950-1990 Special Topics in Health Information Management. 1–3 Credits
Designed for outreach into the community and for health information practitioners and students interested in health information careers. Different courses may be available each semester. Consult the schedule of classes for details.

HIM-2510 Health Information Statistics and Quality Improvement. 4 Credits
Focuses on health data and vital statistics reporting, data presentation techniques, cancer programs and registries, quality assessment/improvement, utilization review and risk management. Prerequisites: MAT-1140, HIM-1581 and HIM-1600. 3 class/3 lab hours. (Offered fall only.)

HIM-2530 Health Information Management. 3 Credits
Focuses on the management of a health information department and information technology. Prerequisites: HIM-2510 and MGT-1550.

Capstone Course: Students must complete a minimum of 50 credits, including any prerequisite courses, prior to enrolling in this course. A cumulative GPA of 2.00 or better is also required. (Offered spring only.)

HIM-2550 Health Information in Alternative Care. 2 Credits
Focus is on health information requirements in settings other than acute care. Content will include accreditation, federal regulations, and reimbursement mechanisms as they relate to care settings such as hospice, home health, skilled and intermediate care, rehabilitation and mental health. Prerequisites: HIM-2510; HIM-2580 concurrent or permission of program director. (Offered spring only.)

HIM-2560 Directed Clinical Practice II. 3 Credits
Supervised student practice in simulated laboratory and clinical practice settings; emphasis on inpatient and ambulatory coding with ICD 10-CM/PCS and HCPCS/CPT coding systems using encoder and grouper software, data abstracting and data retrieval from indices. Prerequisites: HIM-1540, HIM-1550, HIM-1581 and HIM-1600; HIM-2510 and HIM-2600 concurrent or permission of program director. 12 clinical hours. (Offered fall only.)

HIM-2580 Directed Clinical Practice III. 2 Credits
Supervised student practice in simulated laboratory and clinical practice settings; emphasis on data access, analysis and data presentation, research methodologies, cancer registry abstracting, quality assessment/improvement, utilization review functions and specialized care facilities. Prerequisites: HIM-2510 and HIM-2560; HIM-2530 and HIM-2550 concurrent. 8 clinical hours. (Offered spring only.)

HIM-2600 Medical Reimbursement and Billing. 3 Credits
Focus is on reimbursement and payment systems in acute and ambulatory care settings. Emphasis will be placed on prospective payment systems, third-party payers, medical claims processing and regulatory compliance issues. Prerequisites: HIM-1580 and HIM-1600; or HIM-1610 or permission of program director. 3 class/1 lab hours. (Offered fall only.)

History (HST)

HST-1310 Ancient and Medieval History. 3 Credits SS
The history of ancient Egyptian, Near Eastern, Greek and Roman civilizations and of the Middle Ages. Prerequisite: Reading proficiency. (Honors version available.)

HST-1320 Modern History. 3 Credits SS
A survey of the history of Europe and of Europe's encounters with the rest of the world from the Renaissance to the First World War, focusing on those political, social, economic and cultural developments that shaped and defined the modern Western world. Prerequisite: Reading proficiency. (Honors version available.)

HST-1370 The World in the Twentieth Century. 3 Credits SS
A comparative survey of the major developments in Europe, Asia, Africa and the Americas during the past century that have led to the formation of the contemporary world. Prerequisite: Reading proficiency.

HST-1410 History of the United States I. 3 Credits SS
American history from the colonial period through the Civil War. Prerequisite: Reading proficiency. (Honors version available.)

HST-1430 History of the United States II. 3 Credits SS
American history from the Civil War to the present. Prerequisite: Reading proficiency. (Honors version available.)

HST-1510 History of African Americans I. 3 Credits SS
Surveys African American history from the beginnings of the Trans-Atlantic slave trade in the colonial era through the end of Reconstruction in 1877. It examines the social, political, cultural, military, economic, and scientific triumphs and tribulations that African Americans experienced. Particular emphasis is placed on describing and analyzing black Americans' resistance to inequality, the development of their institutions, the expansion of slavery, and the Civil War and Reconstruction. Prerequisite: Reading proficiency.

HST-1530 History of African Americans II. 3 Credits SS
Surveys African American history from the end of Reconstruction through the present. Particular emphasis is placed on describing and analyzing black Americans' efforts to counteract the inequalities their communities experienced as a result of Jim Crow laws and racial disenfranchisement. It examines the Great Migration, the Harlem and Chicago Renaissances, Post-World War II integrationist and black Nationalists movements, and black political activism. Prerequisite: Reading proficiency.
HST-2100 History of Women in America. 3 Credits
An introduction to the study of American women from colonial times to the present. Prerequisite: Reading proficiency.

HST-2160 The Modern Middle East. 3 Credits SS
A survey of Middle Eastern history from the late 18th century to the present with emphasis on the 20th century. The areas covered include present day Iraq, Iran, Syria, Jordan, Lebanon, Israel, Turkey, Egypt and the Arabian peninsula. Prerequisite: Reading proficiency. (Offered spring semester only)

HST-2230 History of Latin America and the Caribbean. 3 Credits SS
Latin American history from independence to the present, with an overview of the colonial period. Prerequisite: Reading proficiency.

HST-2310 History of American Foreign Policy. 3 Credits
Foreign policy of the U.S. from 1775 to the present. America as a world power in the 20th century. Prerequisite: Reading proficiency. (Offered fall semester only)

HST-2330 History of the American Civil War. 3 Credits
The American Civil War and its origins, emphasizing the major military campaigns and the impact of the war on American society and culture. Prerequisite: Reading proficiency. (Offered fall semester only)

HST-2350 History of Maryland. 3 Credits
The political, economic, social and cultural history of Maryland from the colonial era to the present. Prerequisite: Reading proficiency. (Offered spring semester only)

HST-2380 History of Prince George’s County. 3 Credits
The socio-cultural and political history of the county from its inception in the 1600s to the present. Emphasis from the Civil War forward. Prerequisite: Reading proficiency and permission of department chair.

HST-2470 African History. 3 Credits SS
Survey of African history from early cultures through European colonialism to modern African nationhood. Prerequisite: Reading proficiency.

HRT-1120 Identification of Tropical and Specialty Plants. 2 Credits
Principles and practices of greenhouse operation and management, including considerations of environmental requirements, plant response and economic factors. 2 class/2 lab hours.

HRT-1080 Introduction to Turfgrass Management. 3 Credits Sc
Principles and practices of turfgrass management, including considerations of environmental requirements, plant response and economic factors. 2 class/2 lab hours.

HRT-1100 Principles of Ornamental Horticulture. 4 Credits Sc
Origins of horticulture and the classification, structure, growth and development of horticultural plants. Practical applications of horticultural principles and overview of the industry. 3 class/3 lab hours.

HRT-1030 Principles of Landscape Contracting and Design. 3 Credits
Organizational, financial and managerial aspects of landscape contracting, including facilities, marketing, purchasing and quality control. 2 class/2 lab hours.

HRT-1050 Principles of Greenhouse Management. 3 Credits
Principles and practices of greenhouse operation and management, including considerations of environmental requirements, plant response and economic factors. 2 class/2 lab hours.

HRT-1140 Annuals and Perennials. 2 Credits
Culture, maintenance and identification of annual, biennial and perennial herbaceous plants of the mid-Atlantic region and their use in landscaping. 1 class/2 lab hours.
HRT-1160 Woody Ornamental Plants I. 3 Credits
Identification, landscape use and maintenance of trees, shrubs, vines and ground covers commonly found in the mid-Atlantic region. Focus on evergreens and spring flowering trees. 2 class/2 lab hours.

HRT-1170 Woody Ornamental Plants II. 3 Credits
(See description for HRT-1160.) Class focus on deciduous trees. 2 class/2 lab hours.

HRT-1200 Plant Diseases and Pests. 3 Credits
Insect pests and diseases of ornamental plants, including causes, diagnosis and control procedures. 2 class/2 lab hours.

HRT-1210 Installation of Interior Plantings. 2 Credits
Interior landscaping in malls, building lobbies and offices, including site evaluation, soils, drainage, mulches, lighting and installation. 1 class/2 lab hours.

HRT-1230 Interior Plantscape Maintenance. 2 Credits
Indoor plant care and maintenance, including pest control and environmental requirements. 1 class/2 lab hours.

HRT-1250 Landscape Installation. 2 Credits
Materials, methods and construction elements of landscaping from site preparation to installation. Laboratory includes a class project. 1 class/2 lab hours.

HRT-1270 Landscape Maintenance. 2 Credits
Horticulturally sound landscape management methods and practices, including pruning, weed control, bed care and quality control. 1 class/2 lab hours.

HRT-1290 Nursery and Garden Center Management. 2 Credits
Principles and techniques of nursery/garden center operation. 1 class/2 lab hours.

HRT-1300 Basic Pesticide Use and Safety. 3 Credits
Fundamentals of basic pesticide use and safety as it relates to the production and maintenance of ornamental horticulture crops. This represents one of two courses required by the Maryland Department of Agriculture (MDA) and the District of Columbia for individuals applying to take the Commercial Pesticide Applicator or Consultant Exam.

HRT-2910-2930 Cooperative Education. 1–3 Credits

HSM-1510 Introduction to the Hospitality Industry. 3 Credits
Overview of hotel, food service and travel/tourism management. Special projects, readings, guest lectures and field trips are included.

HSM-1520 Fundamentals of Meeting, Convention and Event Management. 3 Credits
Addresses basic meeting, convention and event management concepts and practical knowledge to assist in planning meetings like a seasoned professional. The course provides important checklists and resources, and introduces the vocabulary necessary to succeed in meeting planning. It is a must for anyone planning on entering the meeting management or event management profession.

HSM-1550 Food Service Manager Training and Certification in Sanitation. 1 Credit
Provides an overview of the principles of food microbiology, important food-borne diseases, standards that are enforced by food service regulatory agencies and applied measures for the prevention of food-borne diseases and other microbiological problems. It also describes the Hazard Analysis Critical Control Point (HACCP) system and includes ServSafe certification.

Note: Only Culinary Arts students must take CUL-1100 concurrently.

HSM-1560 Catering and Banquet Operations. 3 Credits
Provides essential information needed to operate a successful catering business and manage various catering and banquet operations. Both on- and off-premises catering will be covered in addition to business planning, menu development, pricing, purchasing, preparation, service details, sanitation and management, 2 class/3 lab hours. (Offered fall only.)

HSM-1580 Using Technology in the Hospitality Industry. 3 Credits
Provides an introduction to the principles of basic computer applications (software and hardware) as used in both the hospitality industry and the school/college community. Includes applications in property management, reservation systems (GDS/IDS), property-web reviews, payroll applications, sales-mix and using social networking as part of marketing strategy. Hands-on lab applications for operational use in the industry will include point-of-sale systems, food service control systems, entrepreneurship applications and revenue and cost management. There also will be extensive hands-on training in software critical to success while in college and as future managers, including MS Excel, MS Word, MS Powerpoint, MS Publisher, SIM Games, etc. The course will culminate with a formal presentation demonstrating the student's ability to use appropriate technology as part of a "pitch" to fellow classmates. (Formerly offered as HSM-2110. Students may not receive credit for both HSM-2110 and HSM-1580.)

HSM-1621 Hotel Operations Management. 3 Credits
Provides an overview of hotel and lodging operations, with a focus on rooms division management, including housekeeping and hotel front office management. The course includes principles of revenue management, interdepartmental coordination, and issues facing today's lodging industry. (Formerly HSM-1620. Students may not receive credit for both HSM-1620 and HSM-1621.) Prerequisite: HSM-1510 or permission of instructor.

HSM-1630 Food Service Operations. 3 Credits
A study of the principles required for successful food service management. Includes hands-on food preparation, quality control and management techniques. Prerequisite: Reading proficiency.
HSM-1640 Special Event Management. 3 Credits
Addresses major trends and successful business practices in Event Management such as event design basics, room set-up, event flow, entertainment, food and beverage options, and communication. Students will be armed with tools to improve their effectiveness, success and profitability as event managers. Prerequisite: HSM-1520.

HSM-1650 Planning for Association Events. 1 Credit
Exploration of the role and scope of the meetings and events departments in associations and affinity organizations. Topics include annual conventions, mission and values of the organizations, organizational structures, board governance, typical association divisions, member services and employment opportunities. Prerequisite: Reading proficiency.

HSM-1660 Planning for SMERF Events. 1 Credit
Provides guidance to those who plan and support SMERF events, which are events attended by persons who are members of social, military, educational, religious or fraternal organizations. Topics to be covered are the unique event needs that SMERF groups present, venues, budgeting, vendor relationships and seasonality of this target audience. Prerequisite: Reading proficiency.

HSM-1670 Trade Shows and Expositions. 1 Credit
Studies management and sales of trade shows and expositions. Addresses the basic structure of exhibit halls, attendee and exhibitor needs, purposes and types of shows, facilities, promotion, trends, and employment opportunities. Prerequisite: Reading proficiency.

HSM-1680 Event Sponsorship. 1 Credit
Offers students basic insights into funding streams for events. Addresses formulating ticket and registration costs, reviews sponsorship policy and strategy formulation for fundraising events. Topics include researching and acquiring a portfolio of sponsors, working with sponsors as partners to leverage their investment and evaluate event outcomes. Prerequisite: Reading proficiency.

HSM-1700 Pastry Making. 1 Credit
Demonstration of tortes, tarts and puff pastry. 1 class/2 lab hours for 5 weeks.

HSM-1710 Simplified Gourmet Cooking. 1 Credit
Regional American and classical European entrees are presented with time-saving techniques. 1 class/2 lab hours for 5 weeks.

HSM-1730 Northern Italian Cuisine. 1 Credit
Seafood, veal and poultry with specialty pastas and sauces will be prepared in the classical northern Italian tradition. 1 class/2 lab hours for 5 weeks.

HSM-1740 Bed and Breakfasts. 1 Credit
Introduction to bed and breakfast operations. Topics include concept development, capital requirements, operations and procedures. An overnight stay at a local inn included. One lecture session and field experience.

HSM-1750 Wines and Spirits—Mixology and Service. 1 Credit
Overview of wines, mixology, bar management and service techniques. Successful completion of course requirements earns Training in Alcohol Management Certification. (Minimum age 21) 1 class/2 lab hours for 5 weeks.

HSM-1760 International Cuisines. 1 Credit
Dishes from Greek and Middle Eastern cuisines. Entrees, desserts and breads will be featured. 1 class/2 lab hours for 5 weeks.

HSM-1770 Chef’s Tour of Four Countries. 1 Credit
Become a world traveler as Chef Ernie teaches the tastes and techniques of French, North African, Spanish and Southern Italian cooking. 1 class/2 lab hours.

HSM-1780 Introduction to Chinese Cooking. 1 Credit
Experience the various types of cooking methods and delightful spices in a taste-travel through the four provinces of China. 1 class/2 lab hours.

HSM-1790 Authentic Indian Cooking. 1 Credit
Become an expert on the tastes and techniques of Indian cooking in this course offering authentic Indian cuisine. 1 class/2 lab hours.

HSM-1800 Professional Cake Decorating. 1 Credit
Learn professional techniques to transform cakes and pastries into works of art. The course includes basic flowers and borders, string work, figure piping and techniques for creating special occasion and seasonal cakes. 1 class/2 lab hours for 5 weeks.

HSM-1810 Introduction to Travel and Tourism. 3 Credits
Reviews the historical development of travel and tourism and how tourism planning and regulations affect the travel and hospitality industry. Discusses the impact of hospitality and tourism from an environmental and social perspective. Analyzes why people travel and how they select vacation destinations, and explains techniques to market and promote tourism businesses. Prerequisites: Reading Proficiency and HSM-1510.

HSM-1820 Advanced Professional Cake Decorating. 1 Credit
An intensive course covering the design, construction and decoration of various types of wedding cakes. 1 class/2 lab hours for 5 weeks.

HSM-1830 Hors d’Oeuvres and Appetizers. 1 Credit
Catering and home entertaining take on new excitement. Learn from the experts how to create visually spectacular taste sensations. 1 class/2 lab hours for 5 weeks.

HSM-1840 Classy Southern Cooking. 1 Credit
Old-time southern favorites are updated for modern palates. Sensational spices and unusual condiments are combined with a contemporary flair. 1 class/2 lab hours for 5 weeks.

HSM-1850 Fish and Shellfish Preparation. 1 Credit
This course will identify a large assortment of fish and shellfish as well as how to properly purchase and store them, prepare them for cooking and cook them by a variety of dry heat and moist heat methods. Seasonal and regional dishes will be highlighted when available.

HSM-1860 Weddings and Social Events. 1 Credit
A short course addressing business planning for the wedding planner as well as wedding and social event styles and themes. Also covered are religious and cultural needs, vendors and contracts, stationery, attire, reception logistics, cakes and desserts, music, photography, decorations, favors, pre- and post-celebrations and expanding business revenue streams.
HSM-1870 Chef Selection, Series I. 1 Credit
Designed to introduce culinary students to a series of different culinary topics. It provides the student with the basic knowledge of the foods, food styles and methods used to prepare food. Sanitation, nutrition and food costing will be introduced. Includes preparation and techniques, recipe development, tools and equipment requirements and presentation skills. This course includes appetizers, salads, pasta and desserts.

HSM-1880 Chef Selection, Series II. 1 Credit
Designed to introduce culinary students to a series of different culinary topics. It provides the student with the basic knowledge of the foods, food styles and methods used to prepare food. Sanitation, nutrition and food costing will be introduced. Includes preparation and techniques, recipe development, tools and equipment requirements and presentation skills. This course includes entrees, sauces and soups.

HSM-1890 Chef Selection, Series III. 1 Credit
Designed to introduce culinary students to a series of different culinary topics. It provides the student with the basic knowledge of the foods, food styles and methods used to prepare food. Sanitation, nutrition and food costing will be introduced. Includes preparation and techniques, recipe development, tools and equipment requirements and presentation skills. This course includes vegetables, potatoes, fish and shellfish.

HSM-2020 Food and Beverage Purchasing and Cost Control. 3 Credits
Covers the principles and procedures involved in an effective food and beverage control system, including standards determination, the operating budget, cost-volume-profit analysis, income and cost control, menu pricing, theft prevention, labor cost control and computer applications. Honors version available.

HSM-2040 Bar and Beverage Management. 3 Credits
Provides students with the practical knowledge needed to manage a bar or beverage operation. The course presents principles and theories to support and reinforce the practical aspects.

HSM-2050 Human Resources Management and Training for Hospitality and Tourism. 3 Credits
Provides a thorough look at training by addressing how to assess and analyze the training needs of new and established operations; look upon training and development as an investment; use training tools and techniques; train with technology; measure and evaluate training; and use different training techniques when training employees, supervisors and managers.

HSM-2071 Managing Staff and Service in Hospitality. 3 Credits
Introduces students to the fundamentals of supervision of personnel in the hospitality industry and to how those fundamentals lead to great customer service. Students will learn to view both the staff and patrons as internal and external “customers”; focusing on the triangular communicative relationship between employers, employees, and guests. (Formerly HSM 2070. Students may not receive credit for both HSM 2070 and HSM 2071.)

HSM-2100 Managing Service in Food & Beverage Operations. 3 Credits
Provides students with practical skills and knowledge for effective management of food service operations. It presents basic service principles while emphasizing the importance of meeting and, whenever possible, exceeding the expectations of guests.

HSM-2530 Hospitality Sales and Marketing. 3 Credits
Marketing principles for the hospitality industry. Marketing planning, property feasibility study, sales team functions, advertising and public relations.

HSM-2550 Understanding Hospitality Law. 3 Credits
Provides an awareness of the rights and responsibilities that the law grants to or imposes upon a hotelkeeper and illustrates the possible consequences of failure to satisfy legal obligations.

HSM-2640 Security and Loss Prevention Management. 3 Credits
Explains the issues surrounding the need for individualized security programs, examines a wide variety of security and safety equipment and procedures, discusses guest protection and internal security for asset protection, explores risk management and loss prevention issues and outlines OSHA regulations that apply to lodging properties.

HSM-2700 Sustainability in Hospitality. 3 Credits
A multi-dimensional course reviewing the impact of the hospitality industry on the environment. Students will be introduced to how sustainability trends in hotels, food and beverage operations and the event planning industry can have not only a positive impact on the environment but meet Corporate Social Responsibility (CSR) needs for a company or organization while spending less. Prerequisite: Reading proficiency.

HSM-2760 Hospitality Seminar. 3 Credits
Offers comprehensive coverage of topics taught in hospitality services management and an array of realistic operational and managerial situations and cases students are bound to find on being hired by hospitality companies. Through case study investigation, group discussion and internship and practical learning experiences students will engage in critical thinking and problem solving to shift from scholastic mode into supervisory and managerial roles in the hospitality industry. Capstone Course: Students must complete a minimum of 46 credits prior to enrolling in this course. A minimum cumulative GPA is also required.

HSM-2910-2930 Cooperative Education. 1–3 Credits
CAPPSTONE COURSES: Students must complete a minimum of 46 credits prior to enrolling in this course. A cumulative GPA of 2.00 or better is also required.

Human Services (HUS)

Psychological and Sociological Studies Department
Marlboro Hall, Room 2054
301-322-0525

HUS-1010 Introduction to Human Services. 3 Credits
Provides an introduction to the field of human services as preparation for advanced study or employment in the human services profession. Beginning with historical developments, the course will present issues encountered in the field as well as techniques and resources for intervention. An overview of human services ethics, research, model programs and policies will be covered. In addition, various specializations including youth care, rehabilitation, criminal justice and elder care services will be discussed. Students will develop fundamental active listening and response skills.
HUS-1020 Professional Ethics in Human Services. 1 Credit
Prepares students for ethical decision making in the human services field. Includes the study of selected professional codes of ethics. Case studies will be used for additional practices and integration.

HUS-2010 Counseling, Assessment and Behavior Modification Techniques. 3 Credits
Provides an integrated approach to basic counseling with application to the field of human services. Students will have the opportunity to develop basic counseling skills, utilize theories and/or practice, as well as explore and take action on case application in both professional and paraprofessional settings. Specific behavioral modification principles and techniques will be discussed. Prerequisite: HUS-1010.

HUS-2020 Group and Family Counseling Skills. 3 Credits
An introduction to basic skills of group and family counseling for use with both mentally ill and chemically dependent clients. The course will emphasize patterns of group dynamics, particularly as they relate to therapeutic group process. Traditional views of pathology will be examined with a focus on the role of family dynamics in the formation, maintenance, and treatment of mental illness and chemical dependency. Students will think diagnostically about families utilizing theories and techniques that are relevant to working with families and groups. Prerequisite: HUS-1010.

HUS-2200 Developmental Disabilities 3 Credits
Identifies the characteristics and causes of various developmental disabilities. Topics include a history of service provision, human rights, legislation and litigation, advocacy, and accessing support services. Upon completion, students should be able to demonstrate an understanding of current and historical developmental disability definitions and support systems used throughout the life span. Prerequisite: HUS-1010.

HUS-2300 Chemical Dependency Counseling. 3 Credits
Provides students with a foundation in the theories, causes, characteristics and treatment of chemical dependency and addictive disorders. Students will explore social, family and mental health issues related to chemical dependency. Various treatment approaches, including twelve-step programs and group counseling, will be examined. Practice in basic assessment and counseling skills will be an integral part of the course. Prerequisites: HUS-1010 and PSY-2120.

HUS-2400 Therapeutic Recreation. 3 Credits
Explores various adaptive physical and recreational services designed to meet the needs of special populations in hospitals, recreation or rehabilitation centers, schools, etc. Emphasis is placed on understanding the individual in terms of age, psychological and physical development, handicaps, and their needs for recreation. The class will facilitate recreational activities at local agencies and venues, which may include a swim program. Community involvement, lesson planning and periodic tests are required. Prerequisite: HUS-1010.

HUS-2810 Human Services Internship I. 3 Credits
Provides supervised, practical experience in a human service setting. In addition to the minimum of 90 hours of field experience, participation in a weekly seminar is required. Topics covered will include professionalism in the workplace, establishing performance and learning goals, and benefitting from supervision. Students must meet with the program coordinator to discuss appropriate internship placement before registering for the course. Prerequisite: HUS-2010 and permission of the program coordinator.

HUS-2820 Human Services Internship II. 3 Credits
Provides an opportunity for a second supervised, practical experience in a human service setting. In addition to the minimum of 90 hours of field experience, participation in a weekly seminar is required. Topics covered will build on those covered in HUS-2810 and will include establishing performance and learning goals, recognizing and applying professional ethics, and career planning. Students must meet with the program coordinator to discuss appropriate internship placement before registering for the course. Prerequisite: HUS-2010 and permission of the program coordinator.

Humanities (HUM)

History, Political Science, Geography and Anthropology Department
Marlboro Hall, Room 3078
301-322-0561

HUM-1980 Artistic and Cultural Experiences. 1 Credit
Students earn college credit by independently attending plays, concerts, lectures, films, dance performances and art exhibits. One orientation session required. Course may be repeated for a maximum of 2 credit hours (Honors version available.)

Computer Information Systems is now Information Technology

Information and Engineering Technology Department
Center for Advanced Technology, Room 129
301-322-0752

Prince George’s Community College is a member of CyberWatch, a consortium of colleges, universities and business and government partners dedicated to increasing the quality and quantity of Information Security/Assurance professionals. CyberWatch course numbering, which has been agreed to by member institutions, can assist students who may want to take a particular course at another community college due to work schedules, availability of courses during a particular semester or moving to another county. The common numbering also is useful to institutions articulating with Prince George’s Community College by helping them quickly determine that a course is based on a common CyberWatch model curriculum in Information Security. Each INT course included in this program will show its CyberWatch common course equivalent immediately after the college’s course number and title. All INT prerequisites must be passed with a grade of C or higher.

INT-0990 IC3 Test Preparation. 0 Credits (1 EH)
Preparation for students who prefer to satisfy their computer literacy requirement by becoming Internet and Computing Core Certification (IC3) certified and who wish to take a rapid review in preparation for testing. Designed to be taken instead of enrolling in INT-1010 or upon advice after screening on the first day of INT-1010. Also recommended for any student, including those who have already taken INT-1010, who wishes to prepare for taking the IC3 exams. Students overview the IC3 objectives and procedures, as well as rapidly reviewing concepts from the three areas covered in the IC3 exams: computer fundamen-
INT-0990 continues from previous page

tals, key applications and living online. The course will reflect the latest updates on the current exams.

Note: Will not satisfy program concentration requirement in INT-related curricula. At least part of the course will be conducted online.

INT-1000 Using a Personal Computer. 1 Credit
Preparation for students who lack fundamental computer skills and experience and designed to be taken prior to enrolling in INT-1010 or upon advice after screening on the first day of INT-1010. Students gain familiarity and comfort with using a personal computer and are introduced to using a keyboard and a mouse to operate a personal computer, using the touch keying system. Topics include navigating the World Wide Web; using a word processor to enter text; saving, opening and modifying files using secondary storage media. (Formerly offered as CIS-1000. Students may not receive credit for both CIS-1000 and INT-1000.) 1 class/1 lab hour.

Note: Does not satisfy program concentration requirement in INT-related curricula. May not be taken for credit if credit has previously been received for INT-1010 or higher. May be substituted for INT-1250.

INT-1010 Introduction to Information Technology. 3 Credits CL
(CyberWatch common course equivalent: CW 120)
A survey course in evolving computer technology and its relevance to individuals and society. The societal issues stressed include: privacy, security, ergonomics, accessibility, intellectual property, pervasive computing, as well as other timely topics such as new laws impacting computer use. Becoming fluent in necessary technology applications is integrated into the course and may include such topics as word processing, use of e-mail and Web browsers, spreadsheets, course management systems, and others.

Students possessing skills and knowledge in this area may receive credit for INT-1010 by passing the department's challenge exam (currently the three Internet and Computing Core Certification tests, known as IC3). Students who are already IC3 certified may receive credit for INT-1010 by presenting their certificate to the transfer evaluator in the Office of Admissions and Records.

(Formerly offered as CIS-1010. Students may not receive credit for both CIS-1010 and INT-1010.) Prerequisite: Reading proficiency. 3 class hours with open lab. (Honors version available.)

Note: INT-0990, "IC3 Test Preparation," is available as a test preparation course. Students with little or no computer experience should consider taking INT-1000 Using a Personal Computer, to get the necessary prerequisite skills. All students take a screening test during their first class in INT-1010. Results are used to advise students regarding which course to take.

INT-1111 Programming Logic and Design. 3 Credits
Introduction to computer programming concepts with emphasis on structured program logic and design. Procedural and object oriented concepts are introduced. Design tools such as pseudo-code and flowcharting are covered. Students are introduced to several software packages that may be used to develop flowcharts and pseudo-code. This course does not teach a particular programming language but rather emphasizes problem solving techniques that can be applied to programming in any language. Examples from various programming languages may be used to illustrate concepts. (Formerly offered as CIS-1111. Students may not receive credit for both CIS-1111 and INT-1111.) Prerequisite: INT-1010. 2 lecture/2 lab hours.

INT-1150 Introduction to Database Management Systems. 4 Credits
Introduction to database management techniques using Microsoft Access. Includes fundamentals of database design and programming with emphasis on relational file processing. (Formerly offered as CIS-1150. Students may not receive credit for both CIS-1150 and INT-1150.) Prerequisite: INT-1010, INT-1330 recommended. 3 class/2 lab hours.

INT-1210 Computer Science I. 4 Credits
Computer science concepts studied from theoretical and practical viewpoints, including program analysis and life cycle design, formal syntactics of the Java or other object oriented language, program control structures, subprograms, algorithm design and analysis, recursion, computer architecture, number systems and data storage. Applications studied include numerical methods, creating libraries, character processing, simulating logic circuits, sorting, searching, set operations and use of matrices. Object oriented programming introduced. Structured programming and object design stressed. Java based. (Formerly offered as CIS-1210. Students may not receive credit for both CIS-1210 and INT-1210.) Prerequisites: MAT-2410 and INT-1111; 3 class/3 lab hours.

INT-1220 Computer Science II. 4 Credits
Introduces theoretical and practical treatment of abstract data types and data structures including lists, strings, stacks, queues, search trees and hash tables. Object oriented programming methodology and Java classes are used to implement ADT. Software life cycle is studied. Formal topics include introduction to theory of computation including parsing context-free grammars, Finite State Machines, expression evaluation and notation, program analysis and verification. (Formerly offered as CIS-1220. Students may not receive credit for both CIS-1220 and INT-1220.) Prerequisites: INT-1210, MAT-2420. 3 class/3 lab hours.

INT-1250 Operating the Keyboard. 1 Credit
Develops basic skills to operate the computer keyboard by using the “touch” system. Alphabetic, numeric and special symbols will be taught. (Formerly offered as CIS-1250. Students may not receive credit for both CIS-1250 and INT-1250.) Prerequisite: Reading proficiency. 1 class/1 lab hour.

INT-1290 Beginning Microsoft Word. 1 Credit
An introductory course that emphasizes the effective use of word processing features to effectively create, format, and manage documents. Together with INT-1390, this course prepares students for the Microsoft Office certification exam in Word 2010. (Formerly offered as CIS-1290. Students may not receive credit for both CIS-1290 and INT-1290.) Prerequisite: Reading proficiency. 1 class/1 lab hour.

INT-1330 Integrated Software Applications. 3 Credits
Provides in-depth coverage of a software suite. Includes a review of basic word processing and spreadsheets, as well as more advanced features, introduction to fundamentals of presentation and database software, followed by the production of integrated documents combining elements produced by the different suite applications. Emphasis is placed on data sharing through object linking and embedding. (Formerly offered as CIS-1330. Students may not receive credit for both CIS-1330 and INT-1330.) Prerequisite: INT-1010 or ENT-1770 or equivalent. 2 class/2 lab hours.
INT-1370 Introduction to Help Desk Tools and Procedures. 3 Credits
Students will learn the basic help desk concepts, procedures and tools with emphasis on the team-oriented technical support environment. Students explore the features of software used in a support environment to collect knowledge, schedule and track repairs, such as call logging and reporting. The proper use of telephone-based technology also is presented. (Formerly offered as CIS-1370. Students may not receive credit for both CIS-1370 and INT-1370.) Prerequisite: INT-1010. 2 class/2 lab hours.

INT-1390 Intermediate Microsoft Word. 1 Credit
An introductory course that emphasizes the effective use of word processing features to effectively create, format, and manage documents, using graphics and hyperlinks. Includes coverage of document tracking and referencing. Together with INT-1290, this course prepares students for the Microsoft Office certification exam in Word 2010. (Formerly offered as CIS-1390. Students may not receive credit for both CIS-1390 and INT-1390.) Prerequisite: Reading proficiency. 1 class/1 lab hour.

INT-1450 CCNA 1: Network Fundamentals. 4 Credits
(CyberWatch common course equivalent: CW 150)
First of a four-course sequence to prepare for CCNA certification. TCP, UDP and IP protocols; Ethernet concepts and operation; network subnetting; basic router configuration commands. This class charges an additional $32.00 per credit hour Information Technology Certification fee. (Formerly offered as ENT-1940. Students may not receive credit for both ENT-1940 and INT-1450.) 3 class/2 lab hours.

INT-1460 CCNA 2: Routing Protocols. 4 Credits
(CyberWatch common course equivalent: CW 151)
Configuration of static routes, RIP, EIGRP and OSPF routing protocols; configuration of static routes. Design, configuration and troubleshooting of VLSM networks. This course charges an additional $32.00 per credit hour Information Technology Certification fee. (Formerly offered as ENT-1950. Students may not receive credit for both ENT-1950 and INT-1460.) Prerequisite: INT-1450 (formerly ENT-1940). 3 class/2 lab hours.

INT-1540 Computer Hardware I: A+ Preparation. 3 Credits
Hands-on assembly, configuration, and upgrades for IBM-class personal computers. Basic hardware and software fault isolation techniques. First of a two-course sequence providing preparation for the CompTIA A+ computer repair certification. (Formerly offered as ENT-1840. Students may not receive credit for both ENT-1840 and INT-1540.) 2 class/2 lab hours.

INT-1550 Introduction to Networks: Network+ Preparation. 3 Credits
An overview of local area networks including installation and operation of a computer network from the physical as well as the software and user perspective. Students will design, build and test working networks and associated wiring. Emphasis will be placed on LAN hardware, software, standards and protocols. Helps prepare students for the CompTIA Network+ certification exam. (Replaces both CIS-1400 and ENT-1890. Credit may not be earned for both INT-1550 and CIS-1400 or for both ENT-1890 and INT-1550. Students who need either CIS-1400 or ENT-1890 should take INT-1550 instead.) Prerequisite: INT-1010 or permission of department chair. 2 class/2 lab hours.

INT-1560 Personal Computer Configuration and Assembly. 1 Credit
Students will learn how to configure and assemble a personal computer, install software and optimize operation. (Formerly offered as ENT-1880 and INT-1560.) Prerequisite: INT-1540 (formerly ENT-1840) or permission of department.
Note: Students must purchase components necessary to assemble their own computers.

INT-1620 Computer Security: Security+ Preparation. 3 Credits
(CyberWatch common course equivalent: CW 160)
This introduction to security systems will give students a solid foundation of understanding in different computer security concepts, functions and applications. The course maps to CompTIA Security+ exam objectives which cover general security concepts, communication security, infrastructure security, basics of cryptography and operations/organizational security. Upon completion of this course, students will be prepared to take CompTIA's vendor neutral Security+ exam. Security+ certification is globally recognized as equivalent to an entry-level security specialist. The Security+ exam is accepted as one of the security certification exams by Microsoft toward its MCSA and MCSE certification. (Formerly offered as CIS-1620. Students may not receive credit for both CIS-1620 and INT-1620.) Prerequisite: INT-1010; INT-1700 recommended. 2 class/2 lab hours.

INT-1630 Tactical Perimeter Defense. 3 Credits
(CyberWatch common course equivalent: CW 225)
Focuses on understanding the layers of hardware and software control measures required to control the flow of traffic into and out of the network perimeter and provide an optimized perimeter defense. This course is designed to offer the student a solid foundation in advanced network security fundamentals to include TCP/IP addressing, routing, packet filtering, and installing proxy servers, firewalls, and virtual private networks (VPNs). This course prepares students to take the Strategic Infrastructure Security Exam (SCO 451) for Security Certified Network Specialist (SCNS) certification. (Formerly offered as CIS-1630. Students may not receive credit for both CIS-1630 and INT-1630.) Prerequisites: INT-1620 and INT 1700. 2 lecture/2 lab hours.

INT-1660 Strategic Infrastructure Security. 3 Credits
(CyberWatch common course equivalent: CW 235)
Focuses on understanding security policies, risk analysis, penetration testing, patching and upgrading systems, capturing and analyzing packets, cryptography, and hardening operating systems focusing on internal systems, the interaction among them, and the pathways that lead them outside the security perimeter. This course prepares students to take the Strategic Infrastructure Security Exam (SCO-471) for Security Certified Network Professional (SCNP) certification. (Formerly offered as CIS-1660. Students may not receive credit for both CIS-1660 and INT-1660.) Prerequisite: INT-1630. 2 lecture/2 lab hours.
INT-1680 Ethical Hacking and Network Defense. 3 Credits
Provides an in-depth understanding of how to effectively protect computer networks. Students will learn the tools and penetration testing methodologies used by ethical hackers. In addition, the course provides a thorough discussion of what and who an ethical hacker is and how important they are in protecting corporate and government data from cyber attacks. Students will learn updated computer security resources that describe new vulnerabilities and innovative methods to protect networks. Students will practice footprinting, scanning, enumeration, exploitation, and post-exploitation. Also covered is a thorough update of federal and state computer crime laws, as well as changes in penalties for illegal computer hacking. This course is designed for those interested in systems and application security or who want to take the EC-Council’s Certified Ethical Hacker (CEH) exam (312-50). Prerequisites: INT-1700 and INT-1620. 2 lecture/2 lab hours.

INT-1700 Understanding Operating Systems. 3 Credits
(CyberWatch common course equivalent: CW 130.)
Provides basic working knowledge of computer operating system commands, functions and management using the DOS, Windows, Linux and Unix operating environments. Topics include: memory management, process management, device management, file management and operating system tools. Introduces command structures and explores operations using GUI and Command Language Interfaces. Students will demonstrate proficiency by completing various task-related laboratory assignments. Focus also is on the main topics covered in the A+ certification examination. (Formerly offered as CIS-1700. Students may not receive credit for both CIS-1700 and INT-1700.) Prerequisites: Reading proficiency; INT-1010 or ENT-1770. 2 class/2 lab hours.

INT-1760 Introduction to the New Mainframe: z/OS Basics. 3 Credits
Provides students of information systems technology with the background, knowledge and skills necessary to begin using the basic facilities of a mainframe system running IBM System z/OS. Topics covered include: the mainframe in business today, including mainframe job roles; mainframe interfaces; job control language; mainframe hardware and architecture; middleware for the mainframe; application programming on the mainframe; networking and security topics. 2 class/2 lab hours.

Note: Students without experience working from a command prompt will benefit from INT-1700 or a similar course prior to taking this course. An exposure to programming also may be helpful. (Formerly offered as CIS-1760. Students may not receive credit for both CIS-1760 and INT-1760.) Prerequisites: INT-1010 or equivalent.

INT-1800 Internet and Web Technology. 3 Credits
Provides an overview of the Internet and the major applications, relevant standards and protocols, and ethical issues associated with it. Students will learn to develop a website using storyboarding techniques and HTML and manage it via FTP. Hands-on projects that utilize new and emerging communication technologies will be explored. (Formerly offered as CIS-1800. Students may not receive credit for both CIS-1800 and INT-1800.) Prerequisite: Reading proficiency; INT-1010 recommended. 2 class/2 lab hours.

INT-1850 Client-Side Web Development. 3 Credits
As a continuation of INT-1800, HTML/XHTML and Cascading Style Sheets (CSS) are used to design and create Web pages. These Web pages are further enhanced by including advanced elements of HTML, such as forms and frames and by adding multimedia elements, such as audio, video, and animation. JavaScript is further used to make HTML documents interactive. Other topics discussed include the Document Object Model, the Object-based features of JavaScript, and use of a debugger to debug JavaScript code. (Formerly CIS-1850. Students may not receive credit for both CIS-1850 and INT-1850.) Prerequisite: INT-1800. 2 class/2 lab hours.

INT-1860 Server-Side Web Development. 3 Credits
Building on the knowledge gained in INT-1850 on how to develop Web pages on the client side, students learn how to do server-side Web development using PHP, an open-source scripting language and MYSQL, an open-source database system. Students learn to create and modify Web pages dynamically by executing server-side PHP scripts. Additionally, students learn to set up queries to a relational database system to provide data requested through HTML forms. (Formerly CIS-1860. Students may not receive credit for both CIS-1860 and INT-1860.) Prerequisite: INT-1850. 2 class/2 lab hours.

INT-1901 Emerging Technologies I. 1 Credit
Focuses on the development and application of emerging technologies (past, present and future). Students will develop products, to include (but not limited to): multimedia websites, animation, video, and computer programs using leading-edge technologies such as the Adobe Creative Suite. Technologies utilized will vary as new ones emerge. During the course each student will develop a broad understanding of emerging technologies in general, while developing their knowledge/skill in the use of one particular technology. Learning will be accomplished through assigned reading, class discussion, and hands-on use of state of the art technology. (Formerly offered as CIS-1901. Students may not receive credit for both CIS-1901 and INT-1901.) Prerequisite: INT-1010 with grade of C or better. 1 class/1 lab hour.

INT-2030 Programming in Visual Basic. 4 Credits
Students program in Visual Basic to create business applications featuring a graphical interface. Such programs incorporate multiple simultaneous windows, graphical images, pull-down menus, dialog boxes, and similar objects, as well as event-driven modules and procedures. Emphasizes structured, object-oriented programming. Focuses on advanced graphical controls (built-ins, third party, and user-designed) data access using the ADO.NET technology, Web-based applications, error trapping and handling. (Formerly offered as CIS-2030. Students may not receive credit for both CIS-2030 and INT-2030.) Prerequisite: INT-1111 with grade of C or better. 3 lecture/3 lab hours.

INT-2081 Introduction to Oracle. 4 Credits
Introduces students to data server technology. Covers the concepts of relational and object-oriented databases, with hands-on data modeling and normalization. Introduces the powerful SQL language and uses SQL to teach hands-on concepts in Data Definition Language (DDL) and Data Manipulation Language (DML). (Formerly offered as CIS-2081. Students may not receive credit for both CIS-2081 and INT-2081.) Prerequisite: INT-1111 with grade of C or better. 3 lecture/3 lab hours.
INT-2082 Advanced Oracle and PL/SQL. 4 Credits
Builds on INT-2081, continuing with Oracle database operations and introducing programming with PL/SQL. Includes advanced programming using procedures and functions, parameter passing, event driven programming. Includes an introduction to object oriented concepts in database development as well as a discussion of the capabilities of SQL vs. PL/SQL. Formerly offered as CIS-2082. Students may not receive credit for both CIS-2082 and INT-2082.) Prerequisite: INT-2081 with grade of C or better. 3 class/3 lab hours.

INT-2130 Programming in C++. 4 Credits
Using the C++ language, the course incorporates the concepts covered in INT-1111 and applies them specifically to the C++ programming language. Topics include basic C++ control structures syntax, functions, arrays, pointers and classes/objects. (Formerly offered as CIS-2130. Students may not receive credit for both CIS-2130 and INT-2130.) Prerequisite: INT-1111 with grade of C or better. 3 class/3 lab hours.

INT-2200 Programming in Java. 4 Credits
Comprehensive course in Java incorporating the concepts covered in CIS-1111 and applying them specifically to the Java programming language. Topics include object-oriented programming (classes/objects), control structures, methods, arrays, polymorphism, inheritance, recursion, exception handling, graphical user interfaces, file input/output. (Formerly offered as CIS-2200. Students may not receive credit for both CIS-2200 and INT-2200.) Prerequisite: INT-1111 with grade of C or better. 3 class/3 lab hours.

INT-2300 Windows Desktop Client. 3 Credits
(CyberWatch common course equivalent: CW 232)
Students will learn basic Windows Desktop Operating System administration and configuration. Topics include installing/configuring Windows Desktop Operating System, troubleshooting, network protocol implementation and basic system security. This course charges an additional $32.00 per credit hour Information Technology Certification fee. (Formerly offered as CIS-2300. Students may not receive credit for both CIS-2300 and INT-2300.) Prerequisite: INT-1010 with grade of “C” or better or permission of department chair. 2 class/2 lab hours.

INT-2310 Windows Server Administration. 3 Credits
(CyberWatch common course equivalent: CW 230)
Students will learn Windows Server administration and configuration. Topics covered include installing Windows Server operating system, configuring network services, managing systems access, troubleshooting devices, monitoring and optimizing system performance, implementation of virtual private networks (VPNs) and system security configuration. This course charges an additional $32.00 per credit hour Information Technology Certification fee. (Formerly offered as CIS-2310. Students may not receive credit for both CIS-2310 and INT-2310.) Recommended prerequisite: INT-2300 or familiarity with the Windows Client Desktop. 2 class/2 lab hours.

INT-2312 Windows Active Directory. 3 Credits
Students will analyze business and technical requirements, identifying current and future enterprise needs to design an Active Directory service infrastructure. Students will learn the fundamental skills necessary to install and administer an Active Directory service infrastructure. Topics covered include assessing the impact of Active Directory services on existing systems and processes, creating and implementing a forest model and schema modification plan, defining and naming domains, managing Active Directory users, computer and group accounts, designing site topology, and developing the structure of organizational units. (This course replaces both CIS-2330 and CIS-2350. Students may not earn credit for INT-2312 if they have completed either CIS-2330 or CIS-2350. Students who need one of those courses should take INT-2312 instead.) Prerequisite: INT-2310 with grade of “C” or better. 2 class/2 lab hours.

INT-2314 Windows Network Infrastructure. 3 Credits
Students will analyze business and technical requirements, identifying current and future enterprise needs for supporting a Windows platform Network Infrastructure. Students will learn the fundamental skills necessary to design, install and administer Windows Internet Name Service (WINS), Domain Name System (DNS), Dynamic Host Configuration Protocol (DHCP), Public Key Infrastructure (PKI), Fault tolerance clustering and load balancing, Remote Access Services (RAS) and Routing, Virtual Private Network (VPN), Internet Protocol Security (IPSec) and Network Address Translation (NAT) services. Topics covered include the design and implementation of network infrastructure services and assessing the impact of network infrastructure services on existing systems and networks. (This course replaces both CIS-2320 and CIS-2370. Students may not earn credit for INT-2314 if they have completed either CIS-2320 or CIS-2370. Students who need one of these courses should take INT-2314 instead.) Prerequisite: INT-2310 with grade of “C” or better. 2 class/2 lab hours.

INT-2316 Microsoft Exchange Configuration. 3 Credits
Students will analyze business and technical requirements, identifying current and future enterprise needs to design and implement Microsoft Messaging service infrastructure. Students will learn the fundamental skills necessary to install and configure Microsoft Exchange Messaging service. Topics covered include assessing the impact of Microsoft Exchange Messaging service on existing Enterprise systems and processes, installing and configuring Microsoft Exchange Messaging Service. Recommended prerequisite: INT-2312. 2 class/2 lab hours.

INT-2318 Microsoft Exchange Design and Deployment. 3 Credits
Students will analyze business and technical requirements, identifying current and future enterprise needs to design and implement Microsoft Messaging service infrastructure. Students will learn the fundamental skills necessary to design, deploy, and maintain Microsoft Exchange Messaging service. Topics covered include assessing the impact of Microsoft Exchange Messaging service on existing Enterprise systems and processes, designing, deploying and maintaining Microsoft Exchange Messaging Service. Recommended Prerequisite: INT-2316. 2 class/2 lab hours.

INT-2450 CCNA 3: LAN Switching and Wireless. 4 Credits
(CyberWatch common course equivalent: CW 250)
Design, configuration and troubleshooting of switched LANs, including virtual LANs, trunking and spanning tree. Design, configuration and troubleshooting of wireless networks, includ-
INT-2450 continues from previous page

ning security and privacy components. This course charges an additional $32.00 per credit hour Information Technology Certification fee. (Formerly offered as ENT-1960. Students may not receive credit for both ENT-1960 and INT-2450.) Prerequisite: INT-1460 (formerly ENT-1950). 3 class/2 lab hours.

INT-2460 CCNA 4: Accessing the WAN. 4 Credits
(CyberWatch common course equivalent: CW 251)
Configuring NAT, PAT and DHCP to increase usable addresses. Access lists and other security measures. Design, configuration and troubleshooting of wide area networks using PPP or frame relay. This course charges an additional $32.00 per credit hour Information Technology Certification fee. (Formerly offered as ENT-1970. Students may not receive credit for both ENT-1970 and INT-2460.) Prerequisite: INT-2450 (formerly ENT-1960). 3 class/2 lab hours.

INT-2530 Telecommunications. 3 Credits
Operation of the US telecommunications system, including the local loop, cellular system, the SS7 long distance system and Voice over IP. Coding, compression, error-checking and security systems used to ensure quality and performance. (Formerly offered as ENT-2830. Students may not receive credit for both ENT-2830 and INT-2530.) Prerequisite: INT-1010 or permission of the department.

INT-2540 Computer Hardware II: A+ Preparation. 4 Credits
Diagnosis and troubleshooting techniques for personal computers, with emphasis on setup, configuration conflicts and operating system issues. Second course of a sequence that helps prepare students for the CompTIA A+ certification. (Formerly offered as ENT-2840. Students may not receive credit for both ENT-2840 and INT-2540.) Prerequisite: INT-1540 (formerly ENT-1840). 3 class/3 lab hours.

INT-2560 Advanced PC Configuration and Repair. 4 Credits
Advanced personal computer troubleshooting and repair. Emphasis is on advanced setup issues, BIOS, registry, video, file systems, and RAM issues. (Formerly offered as ENT-2860. Students may not receive credit for both ENT-2860 and INT-2560.) Prerequisite: INT-2540 (formerly ENT-2840). 3 class/3 lab hours.

INT-2690 CISSP Preparation. 3 Credits
(CyberWatch common course equivalent: CW 270)
Explores and reviews all ten domains of the CISSP Common Body of Knowledge (CBK) and can be used as preparation for the Certified Information Systems Security Professional (CISSP) Exam or the Systems Security Certified Practitioner (SSCP) Exam as administered by the International Information Systems Security Certification Consortium (ISC)2. (Formerly offered as CIS-2690. Students may not receive credit for both CIS-2690 and INT-2690.) Prerequisite: INT-1620; INT-1660 recommended. 2 class/2 lab hours.

INT-2720 UNIX/Linux Operating System. 4 Credits
(CyberWatch common course equivalent: CW 140)
An introduction to the features of the UNIX/Linux operating system, including the file system, with an emphasis on programming using a UNIX/Linux shell. The course is conducted on an IBM System zSeries mainframe computer. (Formerly offered as CIS-2720. Students may not receive credit for both CIS-2720 and INT-2720.) Prerequisite: INT-1111. 3 class/3 lab hours.

INT-2760 UNIX/Linux System Administration. 4 Credits
(CyberWatch common course equivalent: CW-241)
An introduction to the procedures and concepts related to the functions of a UNIX/Linux system administrator. Topics include interdependencies of file systems, backups and restores, management of user accounts, peripheral devices, troubleshooting and security. The course is conducted on an IBM System zSeries mainframe computer. (Formerly offered as CIS-2760. Students may not receive credit for both CIS-2760 and INT-2760.) Prerequisite: INT-1700. 3 class/3 lab hours.

INT-2840 Systems Analysis and Project Management. 4 Credits
A structured approach to analysis, design and development of computer information systems, including a team project utilizing project management concepts and tools. This capstone course in the Information Technology A.A.S., Information Science A.S., and Information Security A.A.S. programs should be taken near the end of the student’s program of study. Capstone Course: Students must have completed a minimum of 18 credits of INT/CIS coursework and 45 credits overall prior to enrolling in this course. A minimum cumulative GPA of 2.00 or better is also required. (Formerly offered as CIS-2840. Students may not receive credit for both CIS-2840 and INT-2840.) 3 lecture/3 lab hours.

INT-2890H Honors Colloquium in Information Technology. 3 Credits
This honors colloquium will examine special topics in the field of Information Technology and their relevance across disciplinary perspectives. The issues to be addressed in each colloquium will vary from semester to semester. These courses are designed for students in the Honors program, but are open to others with the approval of the honors coordinator or the instructor. (Formerly offered as CIS-2890H. Students may not receive credit for both CIS-2890H and INT-2890H.) Prerequisite: Reading proficiency and permission of instructor or honors coordinator.

INT-2910-2930 Cooperative Education. 1–3 Credits

Management (MGT)

Business Studies Department
Bladen Hall, Room 210
301-322-0080

The Subject name (MGT) has changed. See "Business Management" (BMT) to be found earlier in this chapter.

Marketing (MKG)

Business Studies Department
Bladen Hall, Room 210
301-322-0080

The Subject name (MKG) has changed. See "Business Marketing" (BMK) to be found earlier in this chapter.
A grade of C or higher is required for any course used to satisfy a prerequisite for any other math course. All mathematics courses require extensive use of a computer and/or a graphing calculator. The Mathematics Sequences chart on page 142 is an overview of the sequences of courses offered by the Mathematics Department. Course descriptions should be checked for specific prerequisites. In addition, all math courses have a prerequisite of Reading proficiency.

MAT-0104 Intermediate Algebra. 0 Credits (4 EH)
Continuing development and applications of algebraic, graphing, calculator and problem-solving skills, with emphasis on linear and non-linear expressions, functions, equations and inequalities. ("Non-linear" includes absolute value, polynomial, rational, radical, exponential and logarithmic.) Other topics include real and complex numbers, exponents and radicals. Prerequisites: Math placement score or DVM-0071 completed with grade of C or better, or equivalent. Reading placement score or DVR-0061 completed or concurrent or equivalent. Student must have a graphing calculator.

MAT-1050 Elements of Mathematics. 4 Credits M
Designed for students preparing to teach at the preschool and elementary level. Overview of mathematical systems, including sets, natural numbers, integers, rational and irrational numbers, algorithms and computational methods. Prerequisite: Math placement score or MAT-0104 (formerly MAT-1040) with grade of C or better. 3 class/2 lab hours.

MAT-1060 Elements of Geometry and Logic. 4 Credits M
Designed for students in elementary education. Review and analysis of geometrical principles, logic and the application of computer methods to these topics. Prerequisite: MAT-1050 with grade of C or better. 3 class/2 lab hours.

MAT-1120 Finite Mathematics. 3 Credits M
General overview of college-level mathematics with emphasis on applications to various fields. Use of functions, probability, statistics, graphing and computer techniques in problem-solving. Prerequisite: Math placement score or MAT-0104 (formerly MAT-1040) with grade of C or better.

MAT-1130 Mathematics for the Liberal Arts. 3 Credits M
Survey of modern mathematics and applications, historical perspective and calculator/computer applications with emphasis on the liberal arts. Topics include: sets, probability and statistics, systems of numeration, modern algebraic structures and modern geometries. Prerequisite: Math placement score or MAT-0104 (formerly MAT-1040) with grade of C or better.

MAT-1140 Introduction to Statistics. 3 Credits M
Basic statistical concepts and their applications in a variety of fields. (Credit may not be received for both MAT-1140 and MAT-1160.) Prerequisite: Math placement score or MAT-0104 (formerly MAT-1040) with grade of C or better.

MAT-1160 Elements of Probability and Statistics. 4 Credits M
Basic concepts of probability and statistics with a variety of applications. Designed for students in elementary education; students in other disciplines may tailor assignments to their interest. Credit may not be received for both MAT-1140 and MAT-1160 nor for both MAT-1160 and MAT-1190. Prerequisite: MAT-1050 with grade of C or better.

MAT-1190 Probability. 3 Credits M
Probability and probability distributions. (Credit may not be received for both MAT-1190 and MAT-1160.) Prerequisite: Math placement score or MAT-0104 (formerly MAT-1040) with grade of C or better.

MAT-1340 Trigonometry with Applications to Technology. 3 Credits M
Introduction to problem solving with right-triangle trigonometry and review of geometrical concepts. Emphasis on problem-oriented application of trigonometric functions and relationships. Intermediate algebra required. Prerequisite: Math placement score or MAT-0104 (formerly MAT-1040) with grade of C or better. 3 class/1 lab hours.

MAT-1350 College Algebra. 3 Credits M
Graphing and analysis of functions; study of absolute value, polynomial, rational, exponential and logarithmic functions; systems of equations and inequalities including algebra of matrices and linear programming. Prerequisite: Math placement score or MAT-0104 (formerly MAT-1040) or MAT-1340 with grade of C or better. 3 class/1 recitation hour.

MAT-1360 Trigonometry and Analytic Geometry. 4 Credits M
Trigonometric functions; analytic trigonometry; applications of trigonometry including right triangles, oblique triangles and vectors; complex numbers and polar coordinates; conic sections and parametric equations; sequences and summation; induction and binomial theorem. Preparation for calculus. Successful completion of high school geometry and trigonometry or MAT-1340 is strongly recommended prior to this course. Prerequisite: Math placement score or MAT-1350 with grade of C or better. 4 class/1 recitation hours.

MAT-1370 Precalculus. 5 Credits M
Graphing and analysis of functions; study of absolute value, polynomial, rational, exponential and logarithmic functions; systems of equations and inequalities including algebra of matrices and linear programming; trigonometric functions; analytic trigonometry; applications of trigonometry including right triangles, oblique triangles and vectors; complex numbers and polar coordinates; conic sections and parametric equations; sequences and summation; induction and binomial theorem. Preparation for calculus. Alternative to MAT-1350–1360 sequence for well-qualified students. Successful completion of high school level geometry and trigonometry is necessary. Prerequisite: Math placement score or permission of mathematics department. 5 class/1 recitation hours.

MAT-2160 Applied Calculus I. 3 Credits M
First course in a two-course sequence of applied calculus for business and social and life sciences majors. Topics include limits, differentiation, integration, functions of several variables including partial derivatives and applications. Prerequisite: Math placement score or MAT-1350 with grade of C or better.)
MAT-2170 Applied Calculus II. 3 Credits
Second course in a two-semester sequence of applied calculus for business and social and life sciences majors. Topics include differentiation and integration of trigonometric functions, techniques of integration, improper integrals, functions of several variables, introduction to differential equations, Taylor polynomials, infinite series and applications including probability theory. Offered spring semester only. Prerequisite: MAT-2160 or MAT-2410 with grade of C or better.

MAT-2210 Statistics. 3 Credits
Introduction to statistical concepts and applications, including probability, random variables, sampling, hypothesis testing, regression and ANOVA. Business applications are stressed. A statistical computer software package will be used. Prerequisites: Math placement score or MAT-1350 with grade of C or better. 3 class/1 recitation hour.

MAT-2410 Calculus I. 4 Credits
First course in a three-semester sequence of university-level calculus for a variety of majors including, but not exclusive to, science, engineering, and mathematics. It provides an introduction to single variable calculus; study of limits, continuity, differentiation and its applications, definite and indefinite integrals and the Fundamental Theorem of Calculus. Prerequisite: Mathematics placement score or MAT-1360 with grade of C or better or MAT-1370 with a grade of C or better.

MAT-2420 Calculus II. 4 Credits
Second course in a three-semester sequence of university-level calculus for a variety of majors including, but not exclusive to, science, engineering, and mathematics. Includes the study of integration techniques for single variable functions, applications of integration, improper integrals and infinite series including Taylor series and their applications. Prerequisite: MAT-2410 with grade of C or better.

MAT-2430 Calculus III. 4 Credits
Third course in a three-semester sequence of university-level calculus for a variety of majors including, but not exclusive to, science, engineering, and mathematics. Includes the study of analytic geometry in space, vector-valued functions with applications, differentiation and integration of multi-variable functions with applications, integration in vector fields including line and surface integrals and Green’s, Gauss’s and Stokes’ theorems. Prerequisite: MAT-2420 with grade of C or better.
Multi-Disciplinary

Health Education (MHE)

Allied Health Department
Lanham Hall, Room 304
301-322-0733

MHE-1980 Continuous Quality Improvement (CQI). 1 Credit
Cross-disciplinary course outlining the link between improvement in outcomes and reduced cost. A must for all interested in learning accepted techniques to reduce inconsistency and to strive for quality and measurable outcomes in health care delivery.

MHE-2900 Dysrhythmia Interpretation and ACLS Preparation. 2 Credits
Designed for second-year students in health technology programs or licensed health care professionals. Review of electrical conductivity of the heart and interpretation of atrial and ventricular dysrhythmias. Emphasis on preparation for the Advanced Cardiac Life Support Course using approved treatment algorithms of the American Heart Association. Computer practice simulations will be provided. Prerequisite: NUR-2510 or NUM-1560 or RAD-2410 or RST-1740 with minimum grade of C; or licensed health care professional.

MHE-2920 Advanced Cardiac Life Support: Provider Course. 1 Credit
Interdisciplinary two-day (15 hour) intensive course based on the latest consensus recommendations of the American Heart Association. The ACLS Provider Course implements case-based teaching using critical assessment and treatment action for 10 core cases of cardiovascular and cardiopulmonary emergencies. Lecture and laboratory learning.

Music (MUS)

Art, Music, and Philosophy Department
Marlboro Hall, Room 1068
301-322-0955

MUS-1000 Fundamentals of Music Theory. 3 Credits
Preparation for MUS-1150 for those lacking a strong background. Basic principles of music theory. Prerequisite: Reading proficiency. 2 class/2 lab hours.

MUS-1010 Music Appreciation. 3 Credits
Appraisal of the different styles of music from the Middle Ages to the present time. Not open to music majors. Prerequisite: Reading proficiency.

MUS-1030 Concert Choir. 1 Credit
Mixed chorus performing music selected from the Renaissance to the present. Required for voice majors. May be repeated for up to 4 credits, 3 lab hours.

MUS-1050 Survey of Music Literature. 3 Credits
Survey of musical repertoire. Prerequisites: Reading proficiency and MUS-115 or permission of instructor.
MUS-1110 Jazz Ensemble. 1 Credit
Group performance for instrumentalists. Required for students taking applied instrumental lessons. May be repeated for up to 4 credits. 3 lab hours.

MUS-1150 Theory I. 3 Credits
Principles of music theory. Primary triads and inversion, cadence, form, keyboard, solfege, dictation. Prerequisite: Placement exam or MUS-1000. 2 class/4 lab hours.

MUS-1160 Theory II. 3 Credits
Continuation of MUS-1150. Secondary triads, nonharmonic tones, dominant and supertonic seventh chords and inversions, keyboard, solfege, dictation. Prerequisite: MUS-1150. 2 class/4 lab hours.

MUS-1210 Class Piano I. 1 Credit
Group piano instruction for beginners; music reading, scales, chords, repertory. Practice facilities available. Required of non-piano music majors. 2 lab hours.

MUS-1220 Class Piano II. 1 Credit
Group instruction for advanced beginners. Practice facilities available. Prerequisite: MUS-1210 or referral. 2 lab hours.

MUS-1230 Class Voice I. 1 Credit
Training the singing voice, applying vocal principles to the preparation of songs. Required of non-voice music majors. 2 lab hours.

MUS-1240 Class Voice II. 1 Credit
English, Italian, German and French pronunciation in song literature, stage presence and recital planning. 2 lab hours.

MUS-1250 Sight Singing and Ear Training. 1 Credit
The study of aural skills, including sight singing of standard music scores with soffeggio, and dictation of harmonic, melodic, and rhythm- metric materials. Prerequisite: MUS-1000 with a grade of C or better or placement exam. 2 lab hours.

MUS-1290–1420 Applied Music (Private Instruction).* 2 Credits
Grade of C or better in the first course plus permission of the Music Department, in order to enroll in the second course in the sequence. One 60-minute private lesson per week plus assigned independent practice.

*Special Fee: $250.00 for private instruction, one hour per week per semester. Private lessons may be taken as a major emphasis toward a music degree, as a supplementary subject in the music program or for personal enrichment. Students enrolling for credit must audition and are required to perform in two seminars, attend eight seminars, enroll in an ensemble and take a jury exam.

MUS-1310–1320 Woodwind
MUS-1330–1340 Brass
MUS-1350–1360 Strings (including Jazz, Classical and Bass Guitar)
MUS-1370–1380 Percussion
MUS-1390–1400 Piano
MUS-1410–1420 Organ

MUS-1500 Introduction to Music Technology. 3 Credits
Covers various contemporary and historical technologies used in the composition, notation, performance, recording and distribution of music. Students will explore the influence of technology upon music and musical culture. Prerequisite: Reading proficiency.

MUS-1510 Digital Notation. 3 Credits
Covers the technologies utilized in creating and publishing printed music. Students produce printed vocal scores that include notation and lyrics and instrumental scores that accommodate transposing instruments. Students will gain proficiency with state-of-the-art music publishing techniques. Prerequisite: MUS-1000 or permission of instructor.

MUS-1520 Digital Audio. 3 Credits
Students learn various methods used in audio recording and distribution, utilizing computer systems and specialized hardware. Topics include multi-track recording, audio editing and restoration, signal processing, dithering and format conversion, audio mastering and MIDI. Prerequisite: Reading proficiency. 2 class/2 lab hours.

MUS-1600 MIDI Sequencing I. 3 Credits
Introductory Musical Instrument Digital Interface protocol (MIDI) and its applications. Topics include General MIDI components, recording and data entry, file editing and synchronization. 2 class/2 lab hours.

MUS-2150 Theory III. 3 Credits
Continuation of MUS-1160. Modulation to closely related keys, all seventh chords, altered chords, analysis, keyboard, solfege and dictation. Prerequisite: MUS-1160. 6 lab hours.

MUS-2160 Theory IV. 3 Credits
Continuation of MUS-2150. Augmented-sixth chords, foreign modulation and extended chords, musical analysis and composition. Prerequisite: MUS-2150. 6 lab hours.

MUS-2290–2420 Advanced Applied Music (Private Instruction).* 2 Credits
Enrollment in the first course in each two-course sequence requires a C or better in the 100-level courses offered in the same medium. Participation in the second semester of these two-course sequences requires a C or better in the first semester course and permission of the Music Department. (For example, students must have earned a C or better in MUS-1290 and 1300 in order to enroll in MUS-2290. They must then earn a C or better in MUS-2290, to qualify for enrollment in MUS-2300). One 60-minute private lesson per week plus assigned independent practice.

* Special Fee: $250.00 for private instruction, one hour per week per semester.

MUS-2350–2360 Strings (including Jazz, Classical and Bass Guitar)
MUS-2370–2380 Percussion
MUS-2390–2410 Organ

MUS-2890H Honors Colloquium in Music. 3 Credits
This honors colloquium will examine special topics in the field of music and their relevance across disciplinary perspectives. The issues to be addressed in each colloquium will vary from semester to semester. These courses are designed for students in the Honors program, but are open to others with the approval of the honors coordinator or the instructor. Prerequisites: Reading proficiency and permission of instructor or honors coordinator.

MUS-2910–2930 Cooperative Education. 1–3 Credits
Nuclear Medicine Technology (NUM)

Allied Health Department
Lanham Hall, Room 304
301-322-0733

NUM courses are offered once per year in the fall, spring or summer. Prerequisites require a grade of C or higher.

NUM-1550 Introduction to Nuclear Medicine Technology I. 4 Credits
Introduction to nuclear medicine. Topics include radiation physics, radiation detection and instrumentation and clinical applications of radionuclides. Prerequisites: Admission to the program, BIO-2050/2060, MAT-1120/1140, CHM-1010 or PSC-1150, CIS-1010 with grades of C or higher. 12 class hours for 5 weeks. (Offered spring only.)

NUM-1560 Introduction to Nuclear Medicine Technology II. 4 Credits
Continuation of NUM-1550. Orientation to clinical nuclear medicine, medical terminology, professional ethics and conduct, patient care and radiation safety. Prerequisite: NUM-1550. 6 class hours for 10 weeks. (Offered summer only.)

NUM-2510 Nuclear Medicine Techniques I. 3 Credits
In-depth coverage of clinical procedures, instrumentation, diagnostic computer systems and advanced imaging techniques, including tomography. Prerequisites: NUM-1560; NUM-2530 concurrent. (Offered fall only.)

NUM-2520 Nuclear Medicine Techniques II. 3 Credits
Continuation of NUM-2510. Clinical nuclear medicine, department records and administration, radiation safety and radiation biology. Prerequisites: NUM-2510 and NUM-2530; NUM-2540 concurrent. (Offered spring only.)

NUM-2530 Clinical Nuclear Medicine Technology I. 7 Credits
Directed practice in an affiliated hospital; emphasizes routine diagnostic and therapeutic procedures. Daily image critiques by a licensed/certified technologist. On-site lectures by board-certified physicians supplement the clinical experience. Prerequisite: NUM-1560. 21 clinical hours. (Offered fall only.)

NUM-2540 Clinical Nuclear Medicine Technology II. 9 Credits
Continuation of the directed practice in an affiliated hospital. Students will develop their independent clinical techniques. On-site lectures by board-certified physicians supplement the clinical experience. Prerequisite: NUM-2530. 27 clinical hours. (Offered spring only.)

NUM-2550 Radiopharmacy and Radiation Chemistry. 2 Credits
Basic skills essential to the operation of a radiopharmacy. Production of radionuclides, how radiopharmaceuticals become FDA approved, quality control, adverse reactions, mechanisms of localization, methods of labeling, commercial kits and transportation of radiopharmaceuticals, DOT requirements, NRC requirements and inspections, radionuclide therapy and radiation safety. Prerequisite: NUM-1560. 2 class/1 lab hour. (Offered fall only.)

NUM-2600 Clinical Nuclear Medicine Technology III. 4 Credits
Continued practice in an affiliated hospital. The student will develop independent clinical techniques and create a clinical procedures manual. Prerequisites: NUM-2520 and NUM-2540. Capstone Course: Students must complete a minimum of 53 credits, including any prerequisite courses, prior to enrolling in this course. 36 clinical hours for 5 weeks. (Offered summer only.)

Nursing (NUR)

Nursing Department
Lanham Hall, Room 304
301-322-0731

RN Nursing Program prerequisites, EGL-1010, NUR-1010, BIO-1010, BIO-2050, BIO-2060, PSY-1010 and MAT-1120 or higher. All require a grade of C or better. No RN Nursing program prerequisite can be repeated more than once. LPN program prerequisites, EGL-1010, NUR-1000, BIO-2050, BIO-2060 and PSY-1010 also require a grade of C or higher. No LPN program prerequisite can be repeated more than once. Students must achieve a 2.50 GPA in the required prerequisites for either program.

NUR-1000 Introduction to Practical Nursing (PN). 3 Credits
This is an introductory course with a focus on preparing the student for the rigorous study required for clinical nursing courses. The patient-needs framework and nursing process concepts form the basis of the curriculum. Microbiology concepts related to nursing practices will be mastered by the students. Nursing history, dosage calculations, ethical and legal concepts, critical thinking and test-taking skills are content areas for this course. The student will be introduced to the socialization process of practical nurses. Upon satisfactory completion of this course and other prerequisites the student is eligible to petition for admission into the Practical Nursing program. Prerequisites: EGL-1010, BIO-1010, BIO-2050, placement for college level algebra, officially enrolled as an LPN petitioner, BIO-2060 and PSY-1010 completed or concurrent. 3 class hours. (Offered spring only.)

NUR-1010 Introduction to Nursing (RN). 1 Credit
This is an introductory course which focuses on preparing the student for the rigorous study required for the clinical nursing courses. The patient-needs framework of the curriculum and nursing process will be discussed. Ethical and legal issues, nursing history and discussion of the health care system will be emphasized. Students are introduced to effective methods of stress management, test-taking skills and critical thinking concepts. Cultural sensitivity and dosage calculations are among other concepts explored. Prerequisites: EGL-1010, BIO-1010, BIO-2050, MAT-1120 or higher, BIO-2060 and PSY-1010 completed or concurrent. Upon successful completion of NUR-1010 the student may petition for admission to the Nursing program (RN). 7 weeks: 2 class hours.
NUR-1020 Foundations of Nursing Practice. 7 Credits
This course introduces students to concepts about the individual, environment, health, nursing and the learning process. The acquired knowledge enables students to effectively meet patient needs across the lifespan. Introduction of nursing theory and practice that supports a safe, effective care environment, physiological and psychological integrity, as well as health promotion are emphasized. Guided practice in various health care settings is correlated with classroom and campus lab experiences. Prerequisites: NUR-1000 or NUR-1010, PSY-1010, BIO-2060, BIO-2010 completed or concurrent, admission into the Nursing program (LPN or RN). 15 weeks/3.5 class/8 clinical/2 lab hours.

NUR-1030 Reproductive Health. 3 Credits
This course presents a holistic approach to the care of the childbearing family. Emphasis is on principles and application of theory when using the nursing process in care of patients during all phases of the childbearing cycle. Disorders and diseases affecting the female and male reproductive tract are included. Clinical settings include mother-baby units, labor and delivery, neonatal intensive care, health clinics and postpartum home visits. Prerequisites: NUR-1020, NUR-1040 concurrent. 15 weeks/1.5 class/5 clinical (more than 9 weeks)/1.5 lab hours.

NUR-1040 Physiological Integrity I: Nursing the Client with Acute and Chronic Health Alterations. 5 Credits
This course is designed to assist students to meet the health care needs of patients with commonly occurring acute and chronic health disorders. Physiological and psychosocial adaptation, prevention and early detection and self-care will be emphasized with a focus on maintaining a safe, effective care environment and the application of previously learned skills and information. Pharmacological concepts will be integrated throughout the course content. Clinical experiences will be provided in a variety of supervised, structured health care settings. Prerequisites: NUR-1020; NUR-1030 concurrent. 15 weeks/2.5 class/6 clinical/1.5 lab hours.

NUR-1050 Adaptation and Practices—PN. 8 Credits
This course includes the multifaceted approach to health promotion of children and adults with complex health needs. Nursing interventions for the patient with complex health problems in the areas of safe and effective care, psychosocial adaptation and physiological adaptation are included. The nursing role is developed with emphasis on health maintenance, health promotion and disease prevention. Selected clinical practices in the community and acute care settings allow the student to analyze and synthesize valuable skills and knowledge. Content also includes transition into practice, issues of the nursing profession, roles of the practical nurse and NCLEX-PN preparation. This is the culminating experience course for the PN program. Prerequisites: satisfactory completion of NUR-1000, NUR-1020, NUR-1030, NUR-1040 and completion of all other general education requirements for LPN certificate. 10 weeks: 6 class/14.5 clinical/3.5 lab hours. (Offered summer only.)

NUR-1060 LPN to RN Transition. 6 Credits
This course is designed to prepare licensed practical nurses for entry into the second year of the Associate Degree Nursing program. The nursing role is differentiated with emphasis on health maintenance, health promotion and disease prevention. Content will be presented within the patient-needs framework and include topics such as role transitioning, nursing process, documentation, communication and legal and ethical issues. The Prince George's Community College curriculum framework will be explored. Selected content from the first year of the associate degree program in physiological integrity, growth and development and dosage calculation will be reviewed. Supervised clinical practice in selected acute care and community settings will be provided. Independent study and review of previously learned concepts of nursing care of the maternity and newborn patient will be required. Upon satisfactory completion of this course the student is eligible to enroll in NUR-2010 and NUR-2020. Prerequisites: Admission to the Transition program. 4 class/5 clinical (more than 12 weeks)/2 lab hours. (Offered fall and spring.)

NUR-1070 EMT/Paramedic-RN Transition Option. 8 Credits
This 10-week course (offered in the summer only) is designed to prepare paramedics for entry into the second year of an Associate Degree Nursing program. Information from the first year nursing program courses is presented in a condensed format. The patient-needs framework of the curriculum, as well as nursing processes will be explored. Students are presented with effective methods of stress management, test-taking skills and critical thinking concepts. The nursing role is discussed with emphasis on health maintenance, health promotion, physiological and psychosocial integrity and adaptation. Pharmacological concepts will be integrated throughout the course content. Topics also include role transition, nursing process, documentation, communication, legal and ethical issues. The Prince George's Community College framework will be examined. Selected content for the first year of the associate degree program include acute and chronic health disorders, care of the patients during all phases of the childbearing cycle, disorders and diseases affecting the female and male reproductive tract and dosage calculations. Supervised clinical practice in selected long-term and acute care settings is correlated with classroom and campus laboratory experience. Upon successful completion of this course the student is eligible to enroll into the second year courses of the RN program (NUR-2010 and NUR-2020). Prerequisite: Program admission and completion of EGL-1010, MAT-1120 (or higher), BIO-1010, BIO-2050, BIO-2060, BIO-2010, and PSY-1010 with grades of C or better. (Offered summer only.)

NUR-2010 Nursing Care of Children and Families. 3 Credits
This course is designed to prepare students to meet the healthcare needs of children and their families from infancy through adolescence. Physiologic and psychosocial adaptation, safety and infection control, prevention and early detection of illness and health promotion and maintenance will be emphasized. Pharmacological concepts will be integrated throughout the course. Clinical experience will be provided in a variety of supervised healthcare settings and community sites. Prerequisites: NUR-1030, NUR-1040. NUR 2020 concurrent. 1.5 class/5 clinical (for 9 weeks)/1.5 lab hours.

NUR-2020 Physiological Integrity II: Nursing the Client with Multidimensional System Involvement. 5 Credits
This course is designed to assist students in the theoretical and practical application of the nursing process to meet the healthcare needs of clients with complex, chronic disorders with multidimensional system involvement and rehabilitation needs. Physiologic and psychosocial adaptation, prevention and early detection and self care will be emphasized, with a focus on outcome management and synthesis of information. Pharmacological concepts will
be integrated throughout the course content. Clinical experience will be provided in a variety of supervised healthcare settings. Prerequisites: NUR-1030 and NUR-1040. NUR-2010 concurrent. 2.5 class/6 clinical/1.5 lab hours.

NUR-2031 Psychosocial Integrity. 3 Credits
Emphasizes three levels of prevention and early detection of health problems related to psychosocial adaptation throughout the life span, following the guidelines of the NCLEX Test Plan. Theory and practice include mental health concepts; therapeutic communications and environment; crisis intervention; coping mechanisms; behavioral interventions; cultural diversity and spiritual influences on health; sensory/perceptual alterations; chemical and other dependencies; family dynamics; psychopathology; safe, ethical practice; developmental stages and transitions; and pharmacologic therapies. Prerequisites: NUR-2010 and NUR-2020. NUR-2032 and NUR-2040 concurrent. Capstone Course: Students must complete 53 credits, including all prerequisite courses, prior to enrolling in this course. 1.5 lecture/1.5 lab/5 clinical (for 9 weeks).

NUR-2032 Physiological Integrity III. 3 Credits
Focuses in depth on the nursing care for clients and families experiencing serious threats to physiological integrity. Students synthesize and integrate knowledge, skills, and abilities to evaluate and modify a plan of care; independently plan, implement, and evaluate the delivery of safe, effective care; facilitate optimal physiological functioning to maximize health outcomes. Clinical experiences will be provided in a variety of specialized acute care settings. Prerequisites: NUR-2010 and NUR-2020. NUR-2032 and NUR-2040 concurrent. Capstone Course: Students must complete a minimum of 53 credits, including any prerequisite courses, prior to enrolling in this course.

NUR-2040 Management of Care and Professional Issues. 3 Credits
The focus of this course will be on providing integrated, cost-effective care to clients through coordination, supervision and collaboration with other members of the healthcare team. Students will analyze, synthesize and evaluate care for groups of patients in a variety of healthcare settings. Professional practice issues will be applied to healthcare situations and NCLEX-RN readiness, the role of the nurse and transition into the workforce. Prerequisites: NUR-2010 and NUR-2020. NUR-2031 and NUR-2040 concurrent. 1.5 lecture/1.5 lab/9 clinical (for 5 weeks).

NUR-2890H Honors Colloquium in Nursing. 3 Credits
This honors colloquium will examine special topics in the field of nursing and their relevance across disciplinary perspectives. The issues to be addressed in each colloquium will vary from semester to semester. These courses are designed for students in the Honors program, but are open to others with the approval of the honors coordinator or the instructor. Prerequisites: Reading proficiency and permission of instructor or honors coordinator.

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**Nutrition (NTR)**

_H, Nutrition and Physical Education Department
Novak Field House, Room 104
301-322-0504_

NTR-1010 Introductory Nutrition. 3 Credits Sc
Addresses basic information about essential nutrients and their functions in the body as well as known and hypothesized relationships between long-term diets and development of chronic diseases. The course addresses current issues in nutrition and food safety research. Course content includes current issues in weight management, interactions between nutritional status and physical fitness and food safety. (Formerly BIO-115. Students cannot receive credit for both BIO-115 and NTR-1010.) Prerequisite: Reading proficiency. (Honors version available.)

NTR-1100 Introduction to Food Science. 3 Credits Sc
Introduction to basic chemical, physical and microbiological aspects of food and the ways in which these sciences are integrated into the food industry. Course will examine technical and practical aspects involved in harvest, storage, manufacture, preservation, packaging, distribution and marketing of food products. Current controversies in food science will be explored. (Formerly BIO-116. Students cannot receive credit for both NTR-1100 and BIO-116.) Prerequisite: Reading proficiency.

NTR-1200 Nutrition for Infants and Young Children. 3 Credits
Addresses basic information about essential nutrients and their functions in the body with a special emphasis on the needs of the infant and young child through age eight. The course also addresses topics relevant to current nutrition and food safety research. Students develop knowledge and skills particularly appropriate for early childhood educators and program administrators, including the role of nutrition in cognitive development, behavior, weight control and long-term health. The course also addresses regulatory issues and resources for continuing professional development. This course is open to and appropriate for non-early childhood education majors. Prerequisite: Reading proficiency.

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**Paralegal (PAR)**

_Public Safety and Law Department
Bladen Hall, Room 208
301-322-0553_

PAR-1510 Introduction to Law for the Paralegal. 3 Credits
An overview of the law, the court system and the role of the paralegal in preparing cases for trial and appeal. Prerequisite: Reading proficiency.

PAR-1550 Techniques of Legal Research. 3 Credits
Develops legal research skills. Students utilize a law library for preparing legal research assignments. Prerequisites: Reading proficiency and English proficiency or EGL-0100 (formerly EGL-1000).
PAR-2510 Legal Writing and Documents. 3 Credits
Style and techniques of legal writing. Practice in drawing pleadings, agreements, contracts, deeds, mortgages, wills, trial briefs and memoranda. Prerequisites: PAR-1550.

PAR-2530 Torts and Insurance Law. 3 Credits
Torts recognizable in Maryland and defenses. Personal injury actions and insurance claims. Prerequisites: Reading proficiency. (Online section offered fall semester only.)

PAR-2540 Contracts. 3 Credits
Survey of laws governing the formation and breach of contracts, including defenses, statutes and remedies. Offered fall semester only. (Formerly PAR-1570. Students cannot receive credit for both PAR-1570 and PAR-2540.) Prerequisite: Reading proficiency.

PAR-2550 Real Estate Transaction. 3 Credits
The paralegal's role in the sale and titling of residential property. Not designed to meet Maryland real estate licensure requirements. Prerequisite: Reading proficiency. (Offered fall semester only.)

PAR-2570 Drafting Wills and Probating Estates in Maryland. 3 Credits
Organization and jurisdiction of the orphans' court and the procedures required in drafting wills and administering estates. Prerequisite: Reading proficiency. (Offered spring semester only.)

PAR-2580 Employment Law. 3 Credits
This course examines the rights and duties of employers and employees and the role of the paralegal as part of the team representing each. Topics include the rights and duties of all parties when hiring, promoting, transferring and terminating employees; privacy and discrimination issues; hour and wage laws; the role of government and labor unions; and injury-on-the-job issues. (Formerly PAR-1580. Students cannot receive credit for both PAR-1580 and PAR-2580.) Prerequisite: Reading proficiency. (Offered fall semester only.)

PAR-2590 Domestic Relations. 3 Credits
Pre-nuptial and separation agreements and the laws affecting separation, divorce, alimony, child support, custody and visitation. (Formerly PAR-1590. Students cannot receive credit for both PAR-1590 and PAR-2590.) Prerequisite: Reading proficiency. (Offered spring semester only.)

PAR-2610 Legal Ethics for Paralegals. 3 Credits
Designed to address the subject of ethical considerations which apply to both lawyers and paralegals when dealing with clients, the courts and other parties to disputes. (Formerly PAR-1610. Students may not receive credit for both PAR-1610 and PAR-2610.) Prerequisite: Reading proficiency.

PAR-2650 Civil Litigation. 3 Credits
Survey of the rules regulating civil suits with practical exercises in interviewing clients and witnesses, analyzing documents and drafting pleadings. This is the culminating experience course for the associate degree in Paralegal Studies. (Formerly PAR-1600. Students cannot receive credit for both PAR-1600 and PAR-2650.) Prerequisite: Reading proficiency. Capstone Course: Students must complete a minimum of 47 credits prior to enrolling in this course. A cumulative GPA of 2.00 or better is also required.

PAR-2910–2930 PAR Internship. 1–3 Credits
The internship is a practicum with measurable learning objectives designed to broaden the educational experience. Students are assigned to appropriate governmental and private agencies. 3–9 practicum hours.

Planning for Academic Success (PAS)

Academic Enrichment Department
Marlboro Hall, Room 2118
301-322-0495

PAS-1010 Planning for Academic Success. 3 Credits
An introduction to knowledge and strategies designed to promote success in the college environment. The course focuses on developing 1) interpersonal and self-management skills and attitudes and 2) critical thinking and study skills needed to achieve academic success. Students will acquire a working/practical knowledge of the college's resources, services, procedures and requirements. Self-assessments serve as tools to identify values and goals for individual life planning and academic achievement. Co-requisite: DVR-0061.

PAS-1030 Planning for Academic Success in Math. 1 Credit
Designed to introduce study skill strategies for success in mathematics. Encourages students to explore their feelings about math and to develop strategies to overcome math avoidance and manage anxiety. Emphasis will be placed on note-taking, critical thinking, preparing for, taking, and analyzing math tests. This course is open to students at all levels of mathematical skill. Corequisite: Must be taken with or prior to the first math course if placed into any DVM course or in MAT-0104 (formerly MAT-1040).

Philosophy (PHL)

Art, Music, and Philosophy Department
Bladen Hall, Room 310
301-322-0946

PHL courses require a satisfactory reading score on the placement test or satisfactory completion of appropriate DVR coursework.

PHL-1010 Introduction to Philosophy: The Art of Questioning. 3 Credits
H
Asking and answering the basic and meaningful questions of life and clarifying one's thinking in relation to self, others, laws, nature and God. Prerequisite: Reading proficiency. (Honors version available.)

PHL-1090 Introduction to Logic. 3 Credits
H
The elements of logic; how to translate ordinary language into logical form and craft valid arguments. Prerequisite: Reading proficiency.

PHL-1150 Law and Values. 3 Credits
Analysis of today's social, political and economic issues from the viewpoint of representative philosophers from Plato to the moderns. Prerequisite: Reading proficiency.
PHL-1170 Eastern Philosophy. 3 Credits  
Eastern philosophical and religious thoughts and their influence on relationships between East and West. Prerequisite: Reading proficiency.

PHL-1190 Philosophic Ideas in Imaginative Literature. 3 Credits  
Philosophic ideas in creative writings from Shakespeare to Sartre and from Job to Tolstoy. Prerequisite: Reading proficiency.

PHL-1270 Thinking About Religion. 3 Credits  
Philosophical foundations of religious thought and the response of humanity to religious claims. Prerequisite: Reading proficiency.

PHL-1330 Ethics. 3 Credits  
Involves personal decisions each individual makes daily. The course will identify the various ethical/moral theories that affect those decisions. It will involve current issues and concerns to strengthen a student’s own ethical deliberations and clarify how such deliberations may be applied to the student’s designated career interests. Prerequisite: Reading proficiency. (Honors version available.)

PHL-1350 Biomedical Ethics. 3 Credits  
An examination and application of the ethical principles involved in biomedical decisions such as stem-cell research, termination of treatment, genetic manipulation and informed consent. Prerequisite: Reading proficiency.

PHL-1370 Philosophy and Feminism. 3 Credits  
A philosophical exploration of the feminist perspective, its foundation and its ramifications. Prerequisite: Reading proficiency.

PHL-1400 Introduction to Business Ethics. 3 Credits  
Examination of ethical issues of the business world, including health on the job, consumerism, ecology and advertising. Prerequisite: Reading proficiency.

PHL-2220 Metaphysics. 3 Credits  
Exploration of the basic criteria for determining what is real; the sensible versus the supersensible; the tangible versus the nonphysical; the concrete versus the abstract. Prerequisite: Reading proficiency.

PHL-2890H Honors Colloquium in Philosophy. 3 Credits  
This honors colloquium will examine special topics in the field of philosophy and their relevance across disciplinary perspectives. The issues to be addressed in each colloquium will vary from semester to semester. These courses are designed for students in the Honors program but are open to others with the approval of the honors coordinator or the instructor. Prerequisites: Reading proficiency and permission of instructor or honors coordinator.

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PHL-1000 Lifetime Fitness and Leisure Activities. 1 Credit  
Develops basic skill level in selected activities. These courses are 1 credit and can be used in combination with PED-1030 to transfer to other institutions. These courses meet for half a semester or are late starting. Activities include aerobic workout, basketball, baseball, swimming, weight training and combination activities. 1 class/2 lab hours.

PED-1030 Lifetime Fitness and Leisure Activities. 2 Credits  
Develops athletic abilities from beginner through intermediate skill levels; explores how to experience wellness and stay active throughout one's life. Class also includes lectures and textbook information to help students stay healthier through the understanding of total wellness.

**Weight Training:**
- **Circuit Weight Training:** a series of strength and aerobic exercises using various weight machines and stationary cycles.
- **Weight Training and Conditioning:** weight training programs designed for the individual student.
- **Weight Training and Water Workout:** a combination of weight training and water exercise.

**Sports:**
- Baseball, Basketball, Bowling, Golf, Karate, Racquetball and Tennis. Courses are designed to introduce beginner and intermediate students to the skills, theories, fundamentals, strategies, etiquette and safety considerations of these activities.

**Aerobic Base:**
- **Step Aerobics** for beginning and intermediate students. Activities include other aerobic activities, muscle toning, use of hand weights and nutritional information. **Cardio Kickboxing, Aerobic Dance** and **Cardio Fitness** are classes with an emphasis on cardiorespiratory endurance.

**Swimming:**
Beginner, intermediate and advanced swimming classes are offered. Courses include instruction on strokes, skills and water safety. Water exercise classes include water workout, aquatics and a combination class that includes weight training and water workout. Classes are taught in shallow water as well as deep water. Ability to swim is not necessary, buoyancy belts are provided for individuals on request.

**Social Dance:**
- **Ballroom I:** Basic skills associated with leading and following are introduced. Dances include Foxtrot, Waltz, Swing, Cha Cha and Merengue.
- **Ballroom II:** More advanced figures in dances than level I. Dances include the Tango, Rhumba, Polka, Mambo and Disco.
- **Country Western:** Basic steps are introduced for the Texas two-step, Country Waltz, Shuffie and Cha Cha. Various line and circle dances are also introduced.
- **Hand Dancing:** Basic steps are introduced, turns, start, release and not release turns, wraps, swings, along with history and etiquette.

**Other classes available:**
- Bowling, Walking and Hiking.
PED-1110 Introduction to Physical Education. 2 Credits
Physical education as a profession, including its history, opportunities and education requirements. Includes field trips and other experiences. (Offered fall only.)

PED-1130 Rhythmic Activities. 2 Credits
This course is for elementary teachers, physical education teachers and recreation leaders. It includes rhythmic skills for all age levels, including folk and square dancing. Offered spring semester only.

PED-1510 Motor Development and the Exceptional Child I. 3 Credits
Working with physically, mentally, emotionally and/or socially handicapped children to promote therapeutic motor development. For early childhood, special and elementary education transfer students. 2 class/2 lab hours.

PED-1520 Motor Development and the Exceptional Child II. 3 Credits
Motor development and its relationship to the exceptional child. Refining practical motor development skills by working with children with disabilities. For early childhood, special and elementary education transfer students. Prerequisite: PED-1510. 2 class/2 lab hours.

PED-1530–1810 Skills Laboratories. 1 Credit Each
Basic skills and techniques in sport and physical activities for physical education majors. Recommended for youth league coaches. 3 lab hours.
- PED-1570 Swimming
- PED-1650 Baseball
- PED-1670 Basketball
- PED-1730 Tennis
- PED-1790 Golf
- PED-1810 Weight Training/Physical Fitness

PED-2400 ACE Personal Trainer. 3 Credits
Encompasses theoretical knowledge and practical skills to prepare individuals interested in personal training. Topics include guidelines for instructing safe and effective exercise, essentials of client/trainer relationships, designing and implementing appropriate exercise programs. This course reviews material that prepares students to take the American Council for Exercise (ACE) Examination. Successful completion of this exam is required for certification. 2 lecture/2 lab hours.

PED-2910–2930 Cooperative Education. 1–3 Credits

Physical Science (PSC)

**Physical Sciences and Engineering Department**
Chesapeake Hall, Room 100
301-322-0420

PSC-1010 Introduction to Astronomy. 3 Credits
For nonscience majors. Introduction to the extraterrestrial environment, including astronomical concepts and theories. Prerequisite: Reading proficiency. (Honors version available.)

PSC-1020 Introduction to Astronomy Laboratory. 1 Credit
Laboratory experience in astronomy, including astronomical observations and techniques for studying spectra, planetary characteristics, stars and galaxies. Prerequisites: PSC-1010 completed or concurrent and Reading proficiency. 2 lab hours.

PSC-1050 Introduction to Physical Geology. 3 Credits
Processes and forces involved in the evolution of the Earth, morphology and composition and evaluation of geologic hazards. Prerequisite: Reading proficiency.

PSC-1060 Physical Geology Laboratory. 1 Credit
Rock and mineral identification and analysis and interpretation of geologic and topographic maps and aerial photographs. Prerequisites: PSC-1050 completed or concurrent and Reading proficiency. 2 lab hours.

PSC-1070 Oceanography. 3 Credits
Examination of the physical, chemical, geological and biological aspects of the Earth's oceans. Prerequisite: Reading proficiency.

PSC-1150 Fundamentals of Chemistry and Physics. 4 Credits
Chemistry and physics concepts essential for health technology with emphasis on human systems. (Formerly PSC-151. Credit may not be earned for both PSC-1150 and PSC-1510.) Prerequisites: MAT-0104 and Reading proficiency. 3 class/2 lab hours.

PSC-1200 Exploring Chemistry and Physics Concepts. 4 Credits
Hands-on activity-based course is for students who plan to teach preschool through grade eight. Content is based on topics recommended by National Science Education Content Standards and the K–8 Science Outcomes document of Prince George's County Public Schools. Emphasis is on building process skills and content understanding using a constructivist-based teaching methodology. Prerequisite: Reading proficiency. 3 class/2 lab hours.

PSC-1210 Exploring Earth and Space Science Concepts. 4 Credits
Hands-on activity-based course covering topics in earth and space sciences for students who plan to teach preschool through grade eight. Content is based on topics recommended by National Science Education Content Standards and the K–8 Science Outcomes document of Prince George's County Public Schools. Emphasis is on building process skills and content understanding using a constructivist-based teaching methodology. Prerequisite: Reading proficiency. 3 class/2 lab hours.

PSC-2890H Honors Colloquium in Physical Sciences. 3 Credits
This honors colloquium will examine special topics in the field of physical science and their relevance across disciplinary perspectives. The issues to be addressed in each colloquium will vary from semester to semester. These courses are designed for students in the Honors program but are open to others with the approval of the honors coordinator or the instructor. Prerequisites: Reading proficiency and permission of the instructor or honors coordinator.

PSC-2910–2930 Cooperative Education. 1–3 Credits
Physics (PHY)

**Physical Sciences and Engineering Department**  
**Chesapeake Hall, Room 100**  
**301-322-0420**

**PHY-1010 Introductory Physics I. 4 Credits**  
Sc  
Fundamental concepts and basic laws of mechanics, heat and thermodynamics using a noncalculus approach. Not recommended for science/engineering majors. Prerequisite: MAT-1040 or appropriate test score. 3 class/1 rec/2 lab hours.

**PHY-1020 Introductory Physics II. 4 Credits**  
Sc  
Fundamental concepts of vibration and sound, electricity and magnetism, optics and modern physics. Prerequisite: PHY-1010. 3 class/1 rec/2 lab hours. (Offered spring semester only)

**PHY-1030 General Physics I. 3 Credits**  
Sc  
First semester of three-semester sequence (PHY-1030/2030/2040) for science/engineering transfer students. Calculus-based study of classical mechanics, including laws of motion, force, energy, momentum and gravitation. Prerequisites: MAT-2410; MAT-2420 completed or concurrent. 3 class/1 rec hours.

**PHY-1570 Technical Physics for Engineering Technology. 4 Credits**  
Sc  
Concepts of energy and waves applied to sound, light, electricity and magnetism. For transfer to Engineering Technology program only. Prerequisite: PHY-1030/2030 completed or concurrent. 3 class/3 lab hours.

**PHY-2030 General Physics II. 4 Credits**  
Sc  
Calculus-based survey of kinetic theory, thermodynamics, electricity and magnetism and electromagnetic phenomena. For science/engineering transfers. Prerequisites: PHY-1030 and MAT-2420. 3 class/1 rec/3 lab hours.

**PHY-2040 General Physics III. 4 Credits**  
Calculus-based survey of simple harmonic motion, mechanical and electromagnetic waves, optics, relativity and modern physics. For science/engineering transfers. Prerequisite: PHY-2030. 3 class/1 rec/3 lab hours.

**PHY-2890H Honors Colloquium in Physics. 3 Credits**  
This honors colloquium will examine special topics in the field of physics and their relevance across disciplinary perspectives. The issues to be addressed in each colloquium will vary from semester to semester. These courses are designed for students in the Honors program but are open to others with the approval of the honors coordinator or the instructor. Prerequisites: Reading proficiency and permission of instructor or honors coordinator.

**PHY-2910–2930 Cooperative Education. 1–3 Credits**

Political Science (POS)

**History, Political Science, Geography and Anthropology Department**  
**Marlboro Hall, Room 3078**  
**301-322-0561**

**POS-1000 Introduction to Politics. 3 Credits**  
SS  
Introduction to terms, concepts and theories of political science and their application to law, politics and government. Prerequisite: Reading proficiency.

**POS-1010 American National Government. 3 Credits**  
SS  
A study of the Constitution and the American political system, including how power and authority are acquired and applied. Emphasis will be placed on the Congress, the Presidency and the Supreme Court, as well as on voting dynamics, political parties, interest groups, public opinion and the media. Prerequisite: Reading proficiency. (Honors version available.)

**POS-1020 State and Local Government. 3 Credits**  
SS  
Function, role and responsibilities of state and local governments with emphasis on Maryland and Prince George's County. Prerequisite: Reading proficiency.

**POS-1400 Introduction to Environmental Policy. 3 Credits**  
Provides an overview of the topics studied and methods employed in environmental policy, focusing on the process of formulating, implementing, and evaluating policy responses to environmental problems. Emphasis is given to policy controversies related to scientific uncertainty, risk assessment, resource distribution, and bioethical issues. Prerequisite: BIO-1110.

**POS-2010 Political Ideologies. 3 Credits**  
Survey of prominent political ideologies influencing 20th century history and politics: nationalism, socialism, communism, fascism and democracy. Prerequisite: Reading proficiency. (Offered fall semester only)

**POS-2070 Introduction to International Politics. 3 Credits**  
Analysis of major factors influencing world politics and the conduct of foreign policy. Prerequisite: Reading proficiency. (Offered spring semester only)

**POS-2150 Introduction to Comparative Politics and Government. 3 Credits**  
This course is an introduction to the comparative study of how different polities approach problems of government and governing. Focus will be placed on comparing and contrasting three models of government, democracies, communist regimes and developing nations. Prerequisite: Reading proficiency. (Offered fall semester only. Honors version available.)

**POS-2890H Honors Colloquium in Political Science. 3 Credits**  
Team-taught by political science and psychology professors, this colloquium will examine the phenomenon of leadership by focusing primarily on the scholarship and analysis of several modern approaches. Leadership theories of Harvard psychologist Howard Gardner provide the framework for comparing leaders in a variety of fields. Political sci-
entist James McGregor Burns’s psycho-political paradigm of transforming leadership will be used to examine such leaders as Queen Elizabeth I, Gandhi, Franklin and Eleanor Roosevelt, Martin Luther King and Mikhail Gorbachev, all major contributors to political, military, scientific and cultural aspects of our society. Prerequisites: Minimum score of 95 of the college’s placement exam, 3.00 cumulative GPA and permission of the instructors or the Honors program coordinator.

POS-2910–2930 Cooperative Education. 1–3 Credits

Psychology (PSY)

Psychological and Sociological Sciences Department
Marlboro Hall, Room 2054
301-322-0525

PSY-1010 General Psychology. 3 Credits
University-parallel introductory course which surveys the field of psychology, including the study of behavior, cognitive processes, the concepts of memory, perception and sensation, consciousness, personality development, psychological disorders, psychotherapy and social behavior. Prerequisite: Reading proficiency level. (Honors version available.)

PSY-1150 Death and Dying. 3 Credits
Historical and current concepts of death and dying, including implications of euthanasia and suicide. Prerequisite: Reading proficiency.

PSY-2080 Abnormal Psychology. 3 Credits
Focus on human behaviors and mental experiences that are unusual, unreasonable and distinct from cultural norms. Appropriate psychotherapeutic interventions as well as changing views of mental disorders are considered. Prerequisite: PSY-1010. (Honors version available.)

PSY-2090 The Psychology of Aging. 3 Credits
The biological, psychological, historical and cultural aspects of aging are presented in a multidisciplinary approach. Diversities in the aging experience are discussed. Prerequisite: PSY-1010.

PSY-2100 Psychology of Women. 3 Credits
An introductory course focusing on developmental, ecological, psychological and gender issues relevant to women. Prerequisite: PSY-1010.

PSY-2110 Psychology and African-Americans. 3 Credits
Examines the psychology of African-Americans from Afrocentric, historical, behavioral, developmental and humanistic perspectives. Prerequisite: PSY-1010.

PSY-2120 Drugs and Behavior. 3 Credits
Overview of the use of psychotropic drugs, including abused drugs as well as those used to treat mental disorders. Topics include legal and scientific issues relating to psychopharmacology, as well as its historical context. Treatment, law enforcement and educational perspectives are also considered. Prerequisite: PSY-1010.

PSY-2130 Forensic Psychology. 3 Credits
Introduces concepts that unite psychology and the law and reviews statutes governing competency, insanity and involuntary commitment. Students will become acquainted with forensic assessment techniques, including the interview process, specialized training and the collection of collateral information. Also considered are the assessments of competency to stand trial, criminal responsibility and dangerousness. Pre-sentencing and child custody evaluations are discussed as well. Prerequisite: PSY-1010.

PSY-2190 Social Psychology. 3 Credits
Covers predominant theories and research strategies, focusing on social cognition, including beliefs, judgments, behaviors and attitudes; social influence, including conformity, persuasion and group influence; and social relations, including the theories and research on aggression, prejudice, attraction and intimacy, altruism, conflict and peacemaking. Prerequisite: PSY-101.
**PSY-2200 Introduction to Sport and Exercise Psychology.** 3 Credits
Introduces the principles of psychology as they apply to sport and exercise, including ethics and problems in research methodology, motivation, learning, social behavior, performance enhancement, youth sports, gender issues, leadership and exercise issues. Multicultural and international views of the field are also considered. Prerequisite: PSY-1010.

**PSY-2210 Introduction to Health Psychology.** 3 Credits
Examines the research, theory and practice of health psychology. Focuses on the role lifestyle, diet, activity level and behavior play in the maintenance of health and in the etiology, treatment and prevention of disease. In particular, cultural issues related to health will be examined. Prerequisite: PSY-1010.

**PSY-2890H Honors Colloquium in Psychology—Special Topic: Political and Psychological Perspective on Leadership.** 3 Credits
Team-taught by political science and psychology professors, this colloquium will examine the phenomenon of leadership by focusing primarily on the scholarship and analysis of several modern approaches. Leadership theories of Harvard psychologist Howard Gardner provide the framework for comparing leaders in a variety of fields. Political scientist James McGregor Burns's psycho-political paradigm of transforming leadership will be used to examine such leaders as Queen Elizabeth I, Gandhi, Franklin and Eleanor Roosevelt, Martin Luther King and Mikhail Gorbachev, all major contributors to political, military, scientific and cultural aspects of our society. Prerequisites: Minimum score of 95 of the college's placement exam, 3.00 cumulative GPA and permission of the instructors or the Honors program coordinator.

**PSY-2910–2930 Cooperative Education.** 1–3 Credits

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**Public Relations and Journalism (PRJ)**

**Communication and Theatre Department**

**Queen Anne Fine Arts Building, Room 113**

301-322-0926

**PRJ-1210 Public Relations Techniques.** 3 Credits
Exploration of techniques used in public relations message planning, designing and dissemination. Formerly offered as SPH-1210. Students may not receive credit for both SPH-1210 and PRJ-1210. Prerequisites: Reading and oral proficiencies or SPH-0955 and ESL-0106 (formerly SPH-1000 and ESL-1060) with grades of C or higher. 2 class/2 lab hours.

**PRJ-2210. Introduction to Communication Theory.** 3 Credits
Designed to provide students with an introduction to the field of communication studies. Specifically, it introduces students to the study of communication theory and provides them with the conceptual and theoretical foundation needed to succeed as communication scholars. Concepts and theories learned in this course will be studied in greater detail in the upper level courses required for this major. Prerequisites: Reading and oral proficiencies or SPH-0955 and ESL-0106 (formerly SPH-1000 and ESL-1060) with grades of C or higher.

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**Radiography (RAD)**

**Allied Health Department**

**Lanham Hall, Room 304**

301-322-0733

RAD courses are offered in fall, spring and summer sessions. The program admits a new group of students every fall semester. A minimum grade of C or higher must be achieved in all prerequisites and core courses to enter and remain in the program.

The course content within the Radiography Program is divided into the following modules:

- **Module I: Radiation Protection**
- **Module II: Operation and Quality Control**
- **Module III: Image Production and Evaluation**
- **Module IV: Radiographic Procedures**
- **Module V: Patient Care and Education**
- **Module VI: Clinical Radiography**

Each course encompasses a combination of modules designed to develop and expand the didactic and clinical knowledge base of radiography.

**RAD-1410 Radiographic Procedures I.** 3 Credits
Introduction to standard terminology and general and patient considerations from routine radiographic positioning and projections. Responsibilities of the radiographer for radiation protection of patients, personnel and the public are discussed. Emphasis is on radiographic procedures of the upper extremity and shoulder girdle, lower extremity, thorax and abdomen; incorporating related pathology and consideration of mobile, surgical, pediatric and geriatric patients. Prerequisites: Program admission; EGL-1010, MAT-1120, BIO-2050, BIO-2060 and HIM-1800. RAD-1500, RAD-1510 and RAD-1530 concurrent. 2 lecture/3 lab hours. (Offered fall only.)

**RAD-1420 Radiographic Procedures II.** 3 Credits
Emphasis is on radiographic procedures of the bony thorax, vertebral column, pelvis and gastrointestinal system; incorporating related pathology and consideration of mobile, surgical, pediatric and geriatric patients. Image intensified fluoroscopic equipment and use of contrast media is included in course content. Special focus on surgical radiography. This course expands upon course content of RAD-1410, to include application of radiation protection, equipment operation and quality control, image production and evaluation and patient care and education. Prerequisites: RAD-1410, RAD-1500, RAD-1510 and RAD-1530. RAD-1540 and RAD-1580 concurrent. 2 lecture/3 lab hours. (Offered spring only.)
RAD-1430 Radiation Biology and Protection. 3 Credits
Interactions of radiation with matter and biological effects associated with the use of ionizing radiation are presented. Focus is on radiation safety of patients and personnel based on the ALARA concept NCRP recommendations and NRC and COMAR regulations. Health implications to present and future generations, radiosensitivity and manifestation and treatment of radiation sickness are discussed. Prerequisites: RAD-1550, RAD-2410 and RAD-2530 concurrent. (Offered fall semester only.)

RAD-1500 Image Production and Imaging Equipment I. 3 Credits
Introduction to radiographic imaging systems to include the X-ray tube, operating console and high-voltage generator. X-ray production, interactions of x-radiation with matter and radiographic image formation are explored. Controlling and influencing factors of radiographic image quality are studied in depth. This course prepares students for proper use of radiographic equipment to produce and evaluate diagnostic radiographic images in the clinical setting. Prerequisites: MAT-1120, EGL-1010, BIO-2050, BIO-2060 and MHE-2000. RAD-1410, RAD-1510 and RAD-1530 concurrent. (Offered fall only.)

RAD-1510 Patient Care and Education I. 2 Credits
Introduction to principles of patient care as preparation for interactions in the clinical education setting. Focus on responsibilities to patients, peers and the profession to include professional, medicolegal and ethical issues. Infection control, aseptic techniques, vital signs, medical emergencies and pharmacology are included. Consideration of human diversity and cultural implications associated with health care. Includes medical terminology. Prerequisites: MAT-1120, EGL-1010, BIO-2050, BIO-2060 and MHE-2000. RAD-1410, RAD-1500, RAD-1510 and RAD-1530 concurrent. 2 days/8 hours/weeks. (Offered fall only.)

RAD-1530 Clinical Radiography I. 2 Credits
First course in the clinical education component of the program. Supervised, competency-based clinical education with emphasis on application of comprehensive didactic knowledge in clinical practice. Emphasis on radiographic procedures of the upper extremity and shoulder girdle, lower extremity, thorax and abdomen. Prerequisites: MAT-1120, EGL-1010, BIO-2050, BIO-2060 and MHE-2000. RAD-1410, RAD-1500, RAD-1510 concurrent. 2 days/8 hours/weeks. (Offered fall only.)

RAD-1540 Clinical Radiography II. 4 Credits
Second course in the clinical education component of the program. Expands upon knowledge and skills from previous clinical education courses. Supervised, competency-based clinical education with emphasis on application of comprehensive didactic knowledge and demonstration of proficiency in clinical practice. Emphasis on radiographic procedures of the bony thorax, pelvis, vertebral column and gastrointestinal system. Prerequisites: RAD-1410, RAD-1500, RAD-1510, RAD-1530. RAD-1420 and RAD-1580 concurrent. 2 days/8 hours. (Offered spring only.)

RAD-1550 Clinical Radiography III. 4 Credits
Third course in the clinical education component of the program. Expands upon knowledge and skills from previous clinical education courses. Supervised, competency-based clinical education with emphasis on application of comprehensive didactic knowledge and demonstration of proficiency in clinical practice. Emphasis on radiographic procedures covered during RAD-1410 and RAD-1420. Prerequisite: RAD-1420, RAD-1540 and RAD-1580. 4 days/8 hours. (Offered summer only.)

RAD-1580 Image Production and Imaging Equipment II. 3 Credits
Continuation of RAD-1500, exploring radiographic imaging systems in greater depth to include digital radiography. Quality control of radiographic equipment and analysis of common equipment malfunctions are expanded upon. Image acquisition and processing with both film/screen and digital radiography systems are included. Prerequisites: RAD-1410, RAD-1500, RAD-1510 and RAD-1530. RAD-1420 and RAD-1540 concurrent. (Offered spring only.)

RAD-2000 Computed Tomography Practicum. 1 Credit
Introductory clinical education course for computed tomography. Provides students with a basic understanding of computed tomography equipment and procedures. Provides students with a more complete understanding of correlative anatomy and diagnosis/treatment of disease. Prerequisites: RAD-2410, RAD-2530 and PHY-1430. RAD-2420, RAD-2430 and RAD-2570 and RAD-2540 concurrent. 4 hours/week. (Offered spring only.)

RAD-2410 Radiographic Procedures III. 3 Credits
Emphasis on radiographic procedures of the cranium, computed tomography, cross-sectional anatomy, and special contrast procedures. Includes consideration of mobile, surgical, pediatric and geriatric patients, incorporating related pathology. Expanded study of pediatric, trauma and mobile and surgical radiography from previous semesters. This course expands upon course content of RAD-1420, to include application of radiation protection, equipment operation and quality control, image production and evaluation and patient care and education. Prerequisites: RAD-1550; RAD-2530 and RAD-1430 concurrent. 2 lecture/3 lab hours. (Offered fall only.)

RAD-2420 Radiographic Procedures IV. 2 Credits
The culmination of studies in radiographic procedures to include introduction of additional imaging modalities. This course expands upon course content of RAD-2410, to include application of radiation protection, equipment operation and quality control, image production and evaluation and patient care and education. Emphasis is placed on knowledge application and retention for lifelong learning and professional development. Prerequisites: RAD-2410, RAD-2530 and RAD-1430. RAD-2000, RAD-2430, RAD-2540 and RAD-2570 concurrent. (Offered spring only.)

RAD-2430 Patient Care and Education II. 2 Credits
Expands upon course content of RAD-1510, providing students with a greater understanding of administrative and financial considerations associated with radiographic procedures and medicolegal and ethical issues. Includes basic EKG and dysrhythmia interpretation, oxygen therapy, venipuncture and contrast media administration, pharmacology and assessment of the emergent patient. Focus on skills related to resume writing and obtaining an entry level position in the field of radiography. Prerequisites: RAD-2410, RAD-2530 and RAD-1430. RAD-2000, RAD-2430, RAD-2540 and RAD-2570 concurrent. (Offered spring only.)

RAD-2530 Clinical Radiography IV. 4 Credits
Fourth course in the clinical education component of the program. Expands upon the knowledge and skills from previous clinical education courses. Supervised, competency-based clinical education with emphasis on application of comprehensive didactic knowledge and demonstration of proficiency in clinical practice. Emphasis on cranial and pediatric radiography. Re-enforcement
of application of radiation protection, equipment operation and quality control, image production and evaluation, patient care and education. Prerequisites: RAD-1550, RAD-2410 and RAD-1430 concurrent. 2 days/8 hours.

RAD-2540 Clinical Radiography V. 4 Credits
Final course in the clinical education component of the program. Expands upon knowledge and skills from previous clinical education courses. Supervised, competency-based clinical education with emphasis on application of comprehensive didactic knowledge and demonstration of proficiency in clinical practice. For completing competency requirements for the ARRT examination. All students are required to submit to a criminal background check and to provide documentation of current health assessment and CPR certification prior to clinical placement. Prerequisite: RAD-2980 within the past two years with grade of C or better.

RAD-2970 Computed Tomography Clinical. 4 Credits
Designed for those students who want to transfer their didactic knowledge to the clinical setting. Students will work under the supervision of registered CT technologists and board-certified radiologists as they perform CT examinations. Provides a base for completing competency requirements for the ARRT examination. All students are required to submit to a criminal background check and to provide documentation of current health assessment and CPR certification prior to clinical placement. Prerequisite: RAD-2980 within the past two years with grade of C or better.

RAD-2960 Computed Tomography. 3 Credits
Board preparatory course providing students with knowledge in cross-sectional anatomy, patient care, imaging protocols and physics and instrumentation as they prepare for the ARRT certification exam in CT. Prerequisite: ARRT certification in the appropriate supporting discipline. (Offered spring only.)

RAD-2970 Computed Tomography Clinical. 2 Credits
Designed for those students who want to transfer their didactic knowledge to the clinical setting. Students will work under the supervision of registered CT technologists and board-certified radiologists as they perform CT examinations. Provides a base for completing competency requirements for the ARRT examination. All students are required to submit to a criminal background check and to provide documentation of current health assessment and CPR certification prior to clinical placement. Prerequisite: RAD-2960 within the past 2 years with grade of C or better.

RAD-2980 Magnetic Resonance Imaging. 3 Credits
Board preparatory course providing students with knowledge in cross-sectional anatomy, patient care and safety, imaging protocols and physics and instrumentation as they prepare for the ARRT certification exam in MRI. Prerequisite: ARRT certification in appropriate supporting discipline. (Offered fall and spring only.)

RAD-2990 Clinical Magnetic Resonance Imaging. 2 Credits
Designed for those students who want to transfer their didactic knowledge to the clinical setting. Students will work under the supervision of registered MR technologists and board-certified radiologists as they perform MR examinations. Provides a base for completing competency requirements for the ARRT examination. All students are required to submit to a criminal background check and to provide documentation of current health assessment and CPR certification prior to clinical placement. Prerequisite: RAD-2980 within the past two years with grade of C or better.
RST-1600 Principles of Ventilatory Diseases. 3 Credits
Fundamental concepts of pulmonary pathophysiology and related cardiopulmonary disorders with application of diagnosis, treatment and patient management. Computer-assisted instruction utilized throughout the course. Prerequisites: RST-1530 and RST-1570; RST-1630 concurrent. (Offered spring only.)

RST-1630 Principles and Practice of Respiratory Therapy II. 5 Credits
Assessment, application and troubleshooting of fundamental respiratory therapy equipment as it applies to patient care. Coordinated didactic, laboratory and clinical components to enhance effective cognitive and psychomotor skills. Prerequisites: RST-1530 and RST-1570; RST-1600 concurrent. 2 class/2 lab/10 clinical hours. (Offered spring only.)

RST-1730 Clinical Practice in Respiratory Therapy III. 3 Credits
Continued clinical practicum covering general respiratory care procedures and pulmonary function technology. Prerequisites: RST-1600 and RST-1630. 27 clinical hours for 5 weeks. (Offered summer only.)

RST-1740 Ventilators and Introduction to Critical Care. 3 Credits
Concepts of mechanical ventilators and modes of ventilation with application to clinical practice. Prerequisite: RST-1730. 27 lab hours for 5 weeks. (Offered summer only.)

RST-2490 Neonatal and Pediatric Respiratory Care. 3 Credits
Designed to prepare students with theoretical understanding of fetal cardiopulmonary development, disease states specific to neonatal and pediatric patients as well as implementation of physical assessment and adaptation of respiratory care modalities to meet the needs of these unique groups of critically ill patients. Preparation for student entry into the neonatal/pediatric critical care clinical rotation. Open to second-year respiratory therapy students, credentialed respiratory care practitioners and nurses interested in neonatal/pediatric intensive care. Prerequisites: RST-1740; RST-2500 and RST-2530 concurrent. (Offered fall only.) 2 lecture/2 lab hours.

RST-2500 Pharmacology for Respiratory Therapy. 3 Credits
Concepts of pharmacology of analgesics, cardiovascular drugs, anesthetics and all drugs utilized in the practice of respiratory therapy. Includes EKG interpretation and ACLS preparation. Prerequisites: RST-1740; RST-2490 and RST-2530 concurrent. (Offered fall only.)

RST-2530 Clinical Practice in Critical Care I. 5 Credits
Specialized clinical rotations in adult critical care with application of mechanical ventilation, hemodynamics and management of the patient in the critical care setting. Prerequisites: RST-1740; RST-2490 and RST-2500 concurrent. 15 clinical hours. (Offered fall only.)

RST-2620 Trends in Respiratory Therapy. 2 Credits
Advanced principles of respiratory therapy with emphasis on critical care concepts. Computer-assisted instruction with clinical simulations enhance student learning and preparation for NBRC Board Examinations. Prerequisites: RST-2500 and RST-2530; RST-2630 concurrent. (Offered spring only.)

RST-2630 Clinical Practice in Critical Care II. 5 Credits
Specialized clinical rotations in adult and neonatal critical care. Additional practice will be provided through home care and research facilities. Prerequisites: RST-2500 and RST-2530; RST-2620 concurrent. Capstone Course: Students must complete a minimum of 52 credits, including all prerequisite courses, prior to enrolling in this course. 15 clinical hours. (Offered spring only.)

Service-Learning (SLN)

Service-Learning Office
Bladen Hall, Room 210
301-322-0713

The Service-Learning Program encourages the development of civic responsibility through students’ participation in service projects within the community which support their academic objectives. Service-Learning at Prince George’s Community College is an academic component that can be integrated within the coursework of most disciplines and also is available as a separate independent credit course.

SLN-2010 Service-Learning. 1 Credit
An independent volunteer experience of a minimum of 50 hours with a community organization that meets academic objectives within the student’s educational discipline. May be repeated for a combined total of 6 SLN Credits.

SLN-2020 Service-Learning. 2 Credits
An independent volunteer experience of a minimum of 100 hours with a community organization that meets academic objectives within the student’s educational discipline. May be repeated for a combined total of 6 SLN Credits.

SLN-2030 Service-Learning. 3 Credits
An independent volunteer experience of a minimum of 150 hours with a community organization that meets academic objectives within the student’s educational discipline. May be repeated for a combined total of 6 SLN Credits.

Sociology (SOC)

Psychological and Sociological Sciences Department
Marlboro Hall, Room 2054
301-322-0525

SOC-1010 Introduction to Sociology. 3 Credits
Survey of sociological concepts and their application to socialization, social organizations and social change. Prerequisite: Reading proficiency. (Honors version available.)

SOC-1020 Marriage and Family. 3 Credits
Survey of modern marriage and family issues and related sociological trends in America. Prerequisite: SOC-1010, PSY-1010 or ANT-1030.
Chapter 6—Course Descriptions

Spanish (SPN)

Language Studies Department
Bladen Hall, Room 309
301-322-0946

SPN courses meet for 3 class hours and 1 additional lab hour per week or equivalent.

SPN-1010 Spanish for Beginners. 3 Credits
H
Introduction to the language (reading, writing, understanding and speaking) and to the culture of Spain and the Hispanic countries.

SPN-1020 Spanish for Advanced Beginners. 3 Credits
H
Continued development of Spanish language skills and cross-cultural understanding begun in SPN-1010. Prerequisite: SPN-1010 or two years of high school Spanish or equivalent.

SPN-2010 Intermediate Spanish I. 3 Credits
H
Intermediate study of the Spanish language and culture building on the foundation of Spanish for Beginners. Prerequisite: SPN-1020 or three years of high school Spanish or equivalent.

SPN-2020 Intermediate Spanish II. 3 Credits
H
Continuation of SPN-2010 with emphasis on the history and culture of Spain and Latin America. Prerequisite: SPN-2010 or four years of high school Spanish or equivalent. Native Spanish speakers welcome with permission of the department.

SPN-2040 Advanced Conversation. 3 Credits
H
Advanced preparation for students who wish to develop fluency and confidence in speaking Spanish. Prerequisite: SPN-2010 or four years of high school Spanish or equivalent. Native Spanish speakers welcome with permission of the department.

SPN-2910–2930 Cooperative Education. 1–3 Credits

Speech Communication (SPH)

Communication and Theatre Department
Queen Anne Fine Arts Building, Room 113
301-322-0926

SPH-0951 Oral U.S. English for the Non-native Speaker. 0 Credits (3 EH)
U.S. English speaking skills for non-native speakers with limited English language skills.
Prerequisites: ESL-0081 and ESL-0100 (formerly ESL-0811 and ESL-1000) with grades of C or higher or placement by exam. 3 class/1 recitation hour.

SPH-0955 Oral U.S. Communication Skills for the Non-native Speaker. 0 Credits (3 EH)
Oral communication skills, emphasizing the ability to send clearly spoken messages and to listen accurately in U.S. English. (Formerly offered as SPH-1000. Students may not receive credit for both

SOC-1030 Sociology of Food. 3 Credits
Provides content-specific sociology course that would interest students in nursing, biological sciences and food and hospitality. The growing ethnic diversity in the United States is implicated in the diet and health trends. The course will provide insights into the correlation between culture, lifestyles, food preparation and consumption and health. Prerequisites: Reading and writing proficiencies.

SOC-1150 Sociology of Death and Dying. 3 Credits
Survey course offering a broad overview of death and dying across cultures. Topics include the historical evolution of care and treatment of the dying and the dead; attitudes toward death; the understanding of and care for terminally ill patients; funeral rituals; burial, mourning and grief practices; grief counseling; and suicide and euthanasia. Prerequisites: Reading and writing proficiencies.

SOC-2010 Social Problems. 3 Credits
Review of problems facing American society and their sociological implications, including theories of social deviance and social disorganization. Prerequisite: SOC-1010, PSY-1010 or POS-1010. (Honors version available.)

SOC-2030 Criminology. 3 Credits
Social and psychological concepts of criminal behavior and the chronic offender. Prerequisite: ANT-1010, SOC-1010 or PSY-1010.

SOC-2040 Introduction to Social Work. 3 Credits
Presentation of the ethics, value, knowledge and policy base, principles and purposes of the profession, including an examination of methods of practice. Traditional and innovative social work settings are discussed. Socio-historical development of Social Work and its influence on contemporary practice are reviewed. Prerequisite: SOC-1010 or PSY-1010 or POS-1010 or ANT-1010 with grade of C or better.

SOC-2090 The Sociology of Minorities. 3 Credits
Outlines the establishment, maintenance and breakdown of dominant processes between ethnic, racial and religious groups with emphasis on cross-cultural and cross-national patterns. Prerequisite: ANT-1030 or PSY-1010 or SOC-1010 or PSY-1010.

SOC-2400 Introduction to Public Health and Health Care Policy. 3 Credits
An interdisciplinary course taught by leaders in the field focusing on the many areas contributing to public health and health policy. The intent is to heighten awareness of learners as both citizens and voters in understanding the importance of public health and health care policy development in the United States. Site visits to local and state health departments and government agencies will be included. Prerequisites: Reading proficiency and EGL-1010.

SOC-2800H Honors Colloquium in Sociology. 3 Credits
This honors colloquium will examine special topics in the field of sociology and their relevance across disciplinary perspectives. The issues to be addressed in each colloquium will vary from semester to semester. These courses are designed for students in the Honors program, but are open to others with the approval of the honors coordinator or the instructor. Prerequisites: Reading proficiency and permission of instructor or honors coordinator.

SOC-2910–2930 Cooperative Education. 1–3 Credits

SPH-0955 continues from previous page

SPH-1000 and SPH-0955. Prerequisites: SPH-0951, ESL-0102 and ESL-0105 (formerly ESL-1020 and 1050) with grades of C or higher or placement by exam. 3 class/1 recitation hour.

SPH-1010 Introduction to Speech Communication. 3 Credits H Oral communication theory and practice focusing on interpersonal, small group and public speaking skills. Prerequisites: Reading and oral proficiencies or SPH-0955 and ESL-0106 (formerly SPH-1000 and ESL-1060) with grades of C or higher. (Honors version available.)

SPH-1030 Argumentation and Debate. 3 Credits Principles, preparation and practice of oral argumentation and debate. Prerequisite: Enrolled in Honors program or permission of department.

SPH-1030H Honors Argumentation and Debate. 3 Credits Principles, preparation and practice of oral argumentation and debate. Prerequisite: SPH-1010, SPH-1050 SPH-1090 or SPH-1110 with a grade of A or B.

SPH-1050 Group Communication and Leadership. 3 Credits H Fundamentals of small group communication, including structuring of groups and extensive practice in group discussion and meeting management. Prerequisites: Reading and oral proficiencies or SPH-0955 and ESL-0106 (formerly SPH-1000 and ESL-1060) with grades of C or higher.

SPH-1070 Voice and Diction. 3 Credits Development of vocal skills and articulation through the use of the International Phonetic Alphabet. Prerequisites: Reading and oral proficiencies or SPH-0955 and ESL-0106 (formerly SPH-1000 and ESL-1060) with grades of C or higher.

SPH-1090 Interpersonal Communication. 3 Credits H Development of oral communication skills to enhance human interaction, including nonverbal and verbal language usage, listening, conflict management and multicultural communication. Prerequisites: Reading and oral proficiencies or SPH-0955 and ESL-0106 (formerly SPH-1000 and ESL-1060) with grades of C or higher. (Honors version available.)

SPH-1110 Public Speaking. 3 Credits H Development of public speaking skills. Prerequisites: Reading and oral proficiencies or SPH-0955 and ESL-0106 (formerly SPH-1000 and ESL-1060) with grades of C or higher.

SPH-1130 Interviewing. 3 Credits Principles and procedures of interviewing, focusing on different types of interviews, their structures and the roles of the interviewer and interviewee. Prerequisites: Reading and oral proficiencies or SPH-0955 and ESL-0106 (formerly SPH-1000 and ESL-1060) with grades of C or higher.

SPH-1170 Oral Interpretation of Literature. 3 Credits Theory and practice of performing prose, poetry and drama. Relationships of the oral interpreter to the work and the audience. Prerequisites: Reading and oral proficiencies or SPH-0955 and ESL-0106 (formerly SPH-1000 and ESL-1060) with grades of C or higher.

SPH-1230 Intercultural Communication. 3 Credits Exploring communication differences and similarities when living and working with people of differing ethnicity, race, sex, age and/or nationality. Prerequisites: Reading and oral proficiencies or SPH-0955 and ESL-0106 (formerly SPH-1000 and ESL-1060) with grades of C or higher.

SPH-2090 Advanced Interpersonal Communication. 3 Credits Provides an in-depth understanding of human communication and social media theories from personal, cultural, social, and organizational perspectives. Designed to help students develop flexibility and competence in their communication skills while using social media, and to better understand the advantages/disadvantages of social media in their interpersonal relationships. These acquired skills will help students enhance their personal, social, and professional relationships, especially as they prepare for organizational advancement and leadership roles. Prerequisite: SPH 1090

SPH-2180 Reader’s Theatre. 3 Credits Group performance of literature using prepared and original scripts. Prerequisite: SPH-1170 or THE-2010 or permission of department.

SPH-2210 Applied Speech Communication and Theatre. 3 Credits Group and individualized instruction in speech, mass media and theatre. Prerequisite: Permission of department. 2 class/2 lab hours.

SPH-2750 Leadership Development. 3 Credits H Development of practical, effective workplace leadership skills through study, observation and application. Integrates readings from the humanities, experiential exercises, films and contemporary readings on leadership. (Credit may not be received for both MGT-2750 and SPH-2750.) Prerequisites: Reading and oral proficiencies or SPH-0955 and ESL-0106 (formerly SPH-1000 and ESL-1060) with grades of C or higher.

SPH-2890H Honors Colloquium in Speech. 3 Credits This honors colloquium will examine special topics in the field of speech and their relevance across disciplinary perspectives. The issues to be addressed in each colloquium will vary from semester to semester. These courses are designed for students in the Honors program, but are open to others with the approval of the honors coordinator or the instructor. Prerequisites: Reading proficiency and permission of instructor or honors coordinator.

SPH-2910–2930 Cooperative Education. 1–3 Credits

Teacher Education (TED)

Teacher Education Department
Marlboro Hall, Room 2011
301-322-0780 or
301-583-5250

All TED courses must be passed with a grade of C or better.

TED-1100 Principles and Practices in Early Childhood Education. 3 Credits Develops an understanding of the roles and responsibilities of the early childhood education professional, and the history and current practices of early childhood education in the field today. Includes
the types of developmentally appropriate programs and related services in the field and their theoretical foundations. (Formerly ECE-1050. Students may not receive credit for both TED-1100 and ECE-1050.) Prerequisite: Reading proficiency

TED-1200 Child Growth and Development. 3 Credits
An introduction to the growth and development of children from birth through adolescence. Emphasis is on theories, milestones, and practices of child development which foster optimum physical, cognitive, social, and emotional development in educational settings. (Formerly offered as ECE-1510. Students may not receive credit for both TED-1200 and TED-1510.) Prerequisite: Reading proficiency.

TED-1300 Methods and Materials in Early Childhood Education. 3 Credits
Focuses on the methods and proper use of materials for effectively teaching young children. Students will plan and implement developmentally appropriate units, lessons, and activities for young children in variety of settings. (Formerly offered as ECE-2570. Students may not receive credit for both ECE-2570 and TED-1300.) Prerequisite: Reading proficiency.

TED-1400 Introduction to Multicultural Education. 3 Credits
An introduction to the principles, concepts, and strategies of multicultural education. Emphasis is on using this knowledge to be able to create a classroom environment that is respectful of all students’ cultures, recognizes the complexity of the world in which they live, and utilizes a variety of tools to foster multicultural awareness. (Formerly offered as ECE-1700. Students may not receive credit for both ECE-1700 and TED-1400.) Prerequisite: Reading proficiency. (Honors version available.)

TED-1980 Teaching and Learning in the 21st Century. 3 Credits
Intended for those students who wish to learn more about the teaching profession or those who may be thinking of changing their majors or careers to the field of education. Students will learn about the different areas of education, the programs for teacher education at the college, what it means to be an education professional, and an introduction to the basic concepts and skills in the field. The course encompasses hands-on activities and out-of-class experiences for students to gain additional knowledge about the field of education. Prerequisite: DVR-0051 or equivalent.

TED-2000 Foundations of Education. 3 Credits
Introduces the study of schools from historical, philosophical, political and sociological perspectives. Current issues and practices in education are explored with attention to the many interactive influences of schools and society. Students who are considering teaching as a career should take this course with TED-2001. (Formerly offered as ECE-2000. Students may not receive credit for both ECE-2000 and TED-2000.) Prerequisite: Reading proficiency. It is recommended that AAT students take TED-2000 concurrently with TED-2001. (Honors version available.)

TED-2001 Field Experience for Foundations of Education. 1 Credit
This course gives students the opportunity to observe local teachers in elementary, middle, and high schools. They will become familiar with the local school system and with how teachers and schools address educational issues studied in TED-2000. They will spend at least 15 clock hours in a school at the level at which they want to be certified. Students will attend a seminar at Prince George’s Community College every other week. (Formerly offered as EDU-2330. Students may not receive credit for both EDU-2330 and TED-2001.) Prerequisite: Reading proficiency. It is recommended that students take TED-2001 concurrently with TED-2000.

TED-2061 Field Experience for Educational Psychology. 1 Credit
Students will engage in guided field observations of the teaching and learning process. They will spend at least 15 clock hours in a school at the level at which they want to be certified. Students will attend a seminar at Prince George’s Community College every other week. The field experience is an opportunity to apply concepts learned in PSY-2060 to processes of teaching and learning at a local school. (Formerly offered as EDU-2350. Students may not receive credit for both EDU-2350 and TED-2061.) Prerequisite: Reading Proficiency. It is recommended that AAT students take this course concurrently with PSY 2060.

TED-2100 Processes and Acquisition of Reading. 3 Credits
Students will be able to explain the language and cognitive prerequisites to the reading acquisition process. Students will demonstrate a knowledge of phonemic awareness, phonics, vocabulary, comprehension and fluency in developing readers. (Formerly offered as EDU-2100. Students may not receive credit for both EDU-2100 and TED-2001.) Prerequisite: Reading proficiency.

TED-2110 Infant and Toddler Curriculum and Teaching. 3 Credits
An introduction to the curriculum and teaching strategies necessary for developing a quality infant and toddler program. Students will plan and implement developmentally appropriate units, lessons, and activities for infants and toddlers in a variety of program settings. (Formerly offered as ECE-1650. Students may not receive credit for both ECE-1650 and TED-2110.) Prerequisites: TED-1100, TED-1200, TED-1300 and TED-1400.

TED-2115 School Age Child Care: Curriculum and Teaching. 3 Credits
An introduction to the curriculum and teaching strategies necessary for developing a quality school age (before and after care) program. Students will plan and implement developmentally appropriate activities or lessons, develop schedules for school-age programming, and examine appropriate practices for teaching in a school age program. Prerequisites: TED-1100, TED-1200, TED-1300 and TED-1400 with grades of “C” or better.

TED-2200 Guiding Behavior in Educational Settings. 3 Credits
Develops an understanding of the strategies for managing and guiding behaviors in children from birth to adolescence. Focuses on how to foster positive social interactions and to engage in positive guidance strategies in a variety of educational settings. (Formerly offered as ECE-2600. Students may not receive credit for both ECE-2600 and TED-2200.) Prerequisites: TED-1100, TED-1200, TED-1300 and TED-1400.

TED-2300 Introduction to Special Education. 3 Credits
Designed as an introduction to the field of special education. The course covers the education of exceptional students: historical, philosophical, educational and legal issues and current practices in assessment, diagnosis and teaching. (Formerly offered as ECE-2030. Students may not receive credit for both ECE-2030 and TED-2300.) Prerequisite: Reading proficiency. It is recommended that A.A.T. students take TED-2301 at the same time as TED-2300.
TED-2301 Field Experience for Special Education. 1 Credit
This course allows students to engage in guided observations of special education practice in local public schools for a total of 15 hours. Students will attend a seminar every other week. This field experience is an opportunity to apply concepts learned in TED-2300 to the processes of teaching and learning at a local school. (Formerly offered as EDU-2340. Students may not receive credit for both EDU-2340 and TED-2301.) Prerequisite: Reading proficiency. It is recommended that students take this course concurrently with TED-2300.

TED-2350 Early Childhood Special Education.
3 Credits
Introduction to the field of special education, including characteristics of exceptional children and developmentally appropriate materials and instructional techniques in a variety of educational settings. (Formerly offered as ECE-1560. Students may not receive credit for both ECE-1560 and TED-2350.) Prerequisite: TED-1100, TED-1200, TED-1300 and TED-1400. (Honors version available.)

TED-2400 Language Arts in Early Childhood Education.
3 Credits
Focuses on understanding the developmental progression of language development in young children, explores strategies for creating an environment which strengthens children’s emerging literacy skills, and identifies methods and materials for teaching young children pre-literacy and literacy skills and concepts. Students will plan and implement developmentally appropriate literacy and pre-literacy units, lessons, and activities for young children in a variety of educational settings. (Formerly offered as ECE-2510. Students may not receive credit for both ECE-2510 and TED-2400.) Prerequisites: TED-1100, TED-1200, TED-1300 and TED-1400.

TED-2450 Child Care Center Administration and Management.
3 Credits
Focuses on the administration and management of a child care center. Emphasis is on meeting state requirements for physical facilities, licensing, insurance, and staffing child care programs. Other topics include record keeping, budgeting, hiring, training and managing staff, food services, equipment, materials, community involvement and resources, and current topics in childcare. (Formerly offered as ECE-1910. Students may not receive credit for both ECE-1910 and TED-2650.) Prerequisites: TED-1100, TED-1200, TED-1300 and TED-1400.

TED-2750 Field Work in Early Childhood Education.
3 Credits
Focuses on the development of the necessary teaching skills to maintain an effective learning environment. These skills include: lesson planning, implementation, and reflection; pedagogy, curriculum planning and assessment; classroom management; and effective communication with other professionals, students, and families. (Formerly offered as ECE-2620. Students may not receive credit for both ECE-2620 and TED-2750.) Prerequisites: TED-1100, TED-1200, TED-1300, TED-1400, and TED-2350. Capstone Course: Students must have completed a minimum of 47 credit hours, including all required prerequisites, prior to enrolling in this course. A cumulative GPA of 2.00 is also required. 2 class/6 field hours.

TED-2751 Field Work in Early Childhood Special Education. 3 Credits
Students will develop the necessary teaching skills to maintain an effective learning environment for children with special needs. These skills include: lesson planning, implementation, and reflection; pedagogy, curriculum planning and assessment; classroom management; and effective communication with other professionals, students, and families. (Formerly offered as ECE-2200. Students may not receive credit for both ECE-2200 and TED-2751.) Prerequisites: TED-1200, TED-1300, TED-1400, TED-2200 and TED-2350 with grades of “C” or better. Capstone Course: Students must have completed a minimum of 47 credit hours, including all required prerequisites, prior to enrolling in this course. A cumulative GPA of 2.00 also required. 2 class/6 field hours.

TED-2800 Materials for Teaching Reading. 3 Credits
Introduces students to a variety of materials to be used for the purposes of developing phonemic awareness, phonics, vocabulary, comprehension and fluency. Students will learn to select and evaluate materials as well as utilize the expertise of parents and other members of the community to help fulfill goals of the reading program. This course is intended for those persons who have a bachelor's degree and are seeking initial teacher certification and for teachers seeking recertification. (Formerly offered as EDCU-2130. Students may not receive credit for both EDCU-2130 and TED-2800.) Prerequisite: Departmental permission required.

TED-2801 Instruction of Reading. 3 Credits
Focuses on the teaching of reading from pre-kindergarten through 8th grade. Students will develop and use a variety of developmentally appropriate word recognition and reading comprehension strategies. Students also will examine a balanced literacy program which fosters phonemic awareness, phonics, vocabulary, comprehension and fluency. This course is intended for those persons who have a bachelor's degree and are seeking initial teacher certification and for teachers seeking recertification. (Formerly offered as EDCU-2110. Students may not receive credit for both EDCU-2110 and TED-2801.) Prerequisite: Departmental permission required.

TED-2802 Assessment of Reading. 3 Credits
Students will expand their understanding of appropriate assessment practices and apply these practices to literacy assessment. Students will learn a variety of assessment tools and techniques for the elementary classroom. For each type of assessment presented, students learn administrative procedures, explore strengths and limitations of the instrument or technique and practice developing instructional implications from results. This course is intended for those persons who have a bachelor's degree and are seeking initial teacher certification and for teachers seeking recertification. (Formerly offered as EDCU-2120. Students may not receive credit for both EDCU-2120 and TED-2802.) Prerequisite: Departmental permission required.

TED-2820 Teaching Reading in the Content Areas: Part I. 3 Credits
Focuses on the essentials of reading processes necessary for secondary students to become proficient readers. Participants gain an understanding of the purposes and types of reading, methods of assessing reading, strategies and skills in reading instruction and affective dimensions of reading. This course is intended for those persons who have a bachelor's degree and are seeking initial...
teacher certification and for teachers seeking recertification. (Formerly offered as EDU-2140. Students may not receive credit for both EDU-2140 and TED-2820.) Prerequisite: Departmental permission required.

TED-2821 Teaching Reading in the Content Areas: Part II. 3 Credits
Expands upon Part I, focusing on types of reading, skills in reading and instruction. The emphasis is on teaching secondary students to learn from text. Participants will formulate research questions, complete a literature review and implement and evaluate a coherent literacy plan. Participants also will implement reading and writing strategies that promote understanding of subject area content. This course is intended for those persons who have a bachelor's degree and are seeking initial teacher certification and for teachers seeking recertification. (Formerly offered as EDU-2150. Students may not receive credit for both EDU-2150 and TED-2821.) Prerequisite: Departmental permission required.

TED-2830 Assessment of Students. 3 Credits
An introduction to tests and measurement in an educational setting. Students will construct the knowledge and understanding needed for selecting, administering, diagnosing, evaluating and reporting results of standardized and informal techniques of measurement. This course will review definition, concepts and current issues in measurement. This course is intended for those persons who have a bachelor's degree and are seeking initial teacher certification and for teachers seeking recertification. (Formerly offered as EDU-2050. Students may not receive credit for both EDU-2050 and TED-2830.) Prerequisite: Departmental permission required.

TED-2840 Elementary Methods. 3 Credits
This course focuses on strategies of teaching in the elementary grades and knowledge of the theory and research supporting these strategies. Opportunities for practice of planning and delivery of instruction will be provided. A goal of this course is to develop the habit of reflective practice and to foster collaborative problem solving. This course is intended for those persons who have a bachelor's degree and are seeking initial teacher certification and for teachers seeking recertification. (Formerly offered as EDU-2400. Students may not receive credit for both EDU-2400 and TED-2840.) Prerequisite: Departmental permission required.

TED-2850 Secondary Methods. 3 Credits
This course is designed to provide secondary teachers with knowledge of theory and teaching practices, current educational goals, both nationally and locally and trends in educational assessment and application. This knowledge will be used to plan, design and conduct effective instruction. Supplemental topics will include multiculturalism and classroom management. This course is intended for those persons who have a bachelor's degree and are seeking initial teacher certification and for teachers seeking recertification. (Formerly offered as EDU-2500. Students may not receive credit for both EDU-2500 and TED-2850.) Prerequisite: Departmental permission required.

TED-2900 Special Education Methods: Birth–12th Grade. 3 Credits
Students will understand and use a variety of organization, teaching and classroom management strategies. The course will focus on effective practices in different settings with all disability groups, as well as collaboration with other involved professionals and parents. This course is intended for those persons who have a bachelor's degree and are seeking initial teacher certification and for teachers seeking recertification. (Formerly offered as EDU-2200. Students may not receive credit for both EDU-2200 and TED-2900.) Prerequisite: Departmental permission required.

TED-2901 Special Education Methods: Birth–6th Grade. 3 Credits
Students develop knowledge and skills in planning lessons for diverse learners, teaching oral language, writing, reading, mathematics and content area material to students with special needs in both early childhood and elementary settings. In addition, students will explore special topics including inclusion, transitioning and social skills development. This course is intended for those persons who have a bachelor's degree and are seeking initial teacher certification and for teachers seeking recertification. (Formerly offered as EDU-2210. Students may not receive credit for both EDU-2210 and TED-2901.) Prerequisite: Departmental permission required.

TED-2902 Special Education Methods: Grade 6–Age 21. 3 Credits
Focuses on current practices in teaching students with special needs in grades 6 through 12. Students will review/demonstrate a variety of teaching techniques in the areas of functional skills, managing the learning environment, reading, writing, mathematics and the content areas. Special focus is placed on transition education and services for adolescents. This course is intended for those persons who have a bachelor's degree and are seeking initial teacher certification and for teachers seeking recertification. (Formerly offered as EDU-2220. Students may not receive credit for both EDU-2220 and TED-2902.) Prerequisite: Departmental permission required.

TED-2950 Special Education Assessment Part I: Birth–12th Grade. 3 Credits
Provides the opportunity for students to develop the knowledge and skills for selecting, administering, interpreting, diagnosing, reporting, using assessment data, monitoring and evaluating of the instructional program. Legal perspectives, technical aspects of assessment tools, accommodations, computer as a tool for assessment, and nondiscriminatory testing will be examined. This course is intended for those persons who have a bachelor's degree and are seeking initial teacher certification and for teachers seeking recertification. (Formerly offered as EDU-2230. Students may not receive credit for both EDU-2230 and TED-2950.) Prerequisite: Departmental permission required.

TED-2951 Special Education Assessment Part II: Birth–12th Grade. 3 Credits
Fosters development of knowledge and skills in assessment, administration, interpretation, programming and alignment of test data with teaching standards. Trends in informal assessment, vocational assessment, work sample analysis, task analysis, portfolios and teacher-made tests will be explored. This course is intended for those persons who have a bachelor's degree and are seeking initial teacher certification and for teachers seeking recertification. (Formerly offered as EDU-2240. Students may not receive credit for both EDU-2240 and TED-2951.) Prerequisite: Departmental permission required.
Television, Radio and Film (TRF)

Communication and Theatre Department
Queen Anne Fine Arts Building, Room 113
301-322-0926

TRF-1310 Introduction to Mass Communication. 3 Credits
Mass media systems: their history, regulation, aesthetics and contemporary impact. Prerequisites: Reading and oral proficiencies or SPH-0955 and ESL-0106 (formerly SPH-1000 and ESL-1060) with grades of C or higher.

TRF-1330 Television Production I. 3 Credits
Techniques of studio production and basic field techniques with practice in student productions. Prerequisites: Reading and oral proficiencies or SPH-0955 and ESL-0106 (formerly SPH-1000 and ESL-1060) with grades of C or higher. 2 class/2 lab hours.

TRF-1410 Introduction to Radio. 3 Credits
Radio as a mass medium: origins and techniques of programming, scriptwriting, announcing, studio production and station operation. Prerequisites: Reading and oral proficiencies or SPH-0955 and ESL-0106 (formerly SPH-1000 and ESL-1060) with grades of C or higher. 2 class/2 lab hours.

TRF-2040 Introduction to Broadcast News. 3 Credits
Provides training in electronic news gathering, interviewing, story developing, reporting, editing and producing news for radio and television. Prerequisites: Reading and oral proficiencies or SPH-0955 and ESL-0106 (formerly SPH-1000 and ESL-1060) with grades of C or higher. 2 class/2 lab hours.

TRF-2310 Introduction to Film. 3 Credits
Historical, artistic and sociological trends of the cinema, supplemented by film viewing and analysis. Credit may not be received for both EGL-2310 and TRF-2310. Prerequisites: Reading and oral proficiencies or SPH-0955 and ESL-0106 (formerly SPH-1000 and ESL-1060) with grades of C or higher. 2 class/2 lab hours.

TRF-2330 Television Production II. 3 Credits
Television production emphasizing field production and editing. Prerequisites: TRF-1330 and permission of department. 3 class/2 lab hours.

TRF-2910–2930 Cooperative Education. 1–3 Credits

Theatre (THE)

Communication and Theatre Department
Queen Anne Fine Arts Building, Room 119
301-322-0926

THE-1010 Introduction to the Theatre. 3 Credits
Appreciating the director, the actor, the playwright and the people behind the scenes in today's theatre. Prerequisites: Reading and oral proficiencies or SPH-0955 and ESL-0106 (formerly SPH-1000 and ESL-1060) with grades of C or higher. (Honors version available.)

THE-1030 Introduction to Stage Technology. 1 Credit
Overview of stage technology as a profession, including its history, architecture, jargon, opportunities, educational and practical requirements. Includes field work. Prerequisites: Reading and oral proficiencies or SPH-0955 and ESL-0106 (formerly SPH-1000 and ESL-1060) with grades of C or higher, or permission of the department.

THE-1040 Introduction to Event Staging. 4 Credits
Introduction to the job of a stage carpenter, emphasizing familiarity with the stage space and its equipment, routine of loading a show into the theatre and running a show. 2 class/4 lab hours.

THE-1050 Play Production. 3 Credits
Basic elements involved in the production of plays in a community or nonprofessional setting. Prerequisites: Reading and oral proficiencies or SPH-0955 and ESL-0106 (formerly SPH-1000 and ESL-1060) with grades of C or higher.

THE-1060 Theatrical Rigging. 4 Credits
Introduction to the job of a stage electrician, emphasizing familiarity with lighting equipment, electrical basics and running show electricity. 2 class/4 lab hours.

THE-1080 Lighting for the Stage. 4 Credits
Introduction to the job of a stage electrician, emphasizing familiarity with lighting equipment, electrical basics and running show electricity. 2 class/4 lab hours.

THE-1090 Fundamentals of Movement. 3 Credits
An examination of various styles of movement for acting, including mime, dance and stage combat. Prerequisite: Reading and oral proficiencies or SPH-0955 and ESL-0106 (formerly SPH-1000 and ESL-1060) with a grade of C or higher.

THE-1100 Concert and Stage Sound Reinforcement. 4 Credits
Introduction to the job of a stage sound person, familiarity with stage and concert sound equipment, loading in show sound, setting up show sound and running show sound. 2 class/4 lab hours.

THE-1110 Introduction to Stage Makeup. 2 Credits
Theory and application of stage makeup, covering the creation of types, characters, race and historical periods. Prerequisites: Reading and oral proficiencies or SPH-0955 and ESL-0106 (formerly SPH-1000 and ESL-1060) with grades of C or higher.

THE-1130 Fundamentals of Theatrical Design. 3 Credits
An examination of the aspects of theatrical design from concept to presentation.

THE-1150 Technical Theatre. 3 Credits
Principles and production of scenery and lighting for the theatre. Prerequisites: Reading and oral proficiencies or SPH-0955 and ESL-0106 (formerly SPH-1000 and ESL-1060) with grades of C or higher.

THE-2010 Principles of Acting I. 3 Credits
The experience of acting, involving imagination, body movement, voice techniques, stage awareness and characterization. Prerequisites: Reading and oral proficiencies or SPH-0955 and ESL-0106 (formerly SPH-1000 and ESL-1060) with grades of C or higher.
THE-2020 Principles of Acting II. 3 Credits
Continuation of THE-2010. Focuses on the further refinement of acting skills. Prerequisite: THE-2010.

THE-2030 Fundamentals of Script Analysis. 3 Credits
Detailed study of the play by analyzing structure, genre, theme, style, character and language. The course also will include an examination of the actor’s role in script analysis and the roles of the director, playwright, dramaturge and audience in the play. Prerequisite: Reading and oral proficiency.

THE-2040 Event and Conference Multimedia Production. 3 Credits
Introduction to audiovisual equipment, routines of setting up special events and routines of working in convention and hotel venues. Prerequisite: THE-1150 with a grade of C or higher or permission of the department. 2 class/2 lab hours.

THE-2050 Fundamentals of Theatre History I. 3 Credits
A study of the development of the theatre from its earliest beginnings to the 17th century. The course will examine archeological evidence, physical structures and how they were used in theatre and the development of the playwright and play. Prerequisite: Reading and oral proficiency.

THE-2060 Theatre Computer Automation and Control. 3 Credits
Introduction to automated lighting equipment and control, familiarity with stage automation and motion control systems, assembling and using the systems. Prerequisite: THE-1150 with a grade of C or higher or permission of the department. 2 class/2 lab hours.

THE-2080 Stage Scenery Construction. 4 Credits
Emphasizes familiarity with scene shop equipment and tools, materials, hardware, joinery, layout and construction of scenery. Prerequisite: THE-1150 with a grade of C or higher or permission of the department. 2 class/4 lab hours.

THE-2100 Concert and Stage Special Effects. 3 Credits
Introduction to stage special effects, electrical and mechanical machinery, firearms and pyrotechnics. Prerequisite: THE-1150 with a grade of C or higher or permission of the department. 2 class/2 lab hours.

THE-2120 Film and Studio Mechanics. 3 Credits
Introduction to film/video production, production organization and job areas and production techniques unique to film. Prerequisites: THE-1150 with a grade of C or higher or permission of the department. 2 class/2 lab hours.

THE-2890H Honors Colloquium in Theatre. 3 Credits
This honors colloquium will examine special topics in the field of theatre and their relevance across disciplinary perspectives. The issues to be addressed in each colloquium will vary from semester to semester. These courses are designed for students in the Honors program, but are open to others with the approval of the honors coordinator or the instructor. Prerequisites: Reading proficiency and permission of instructor or honors coordinator.

THE-2910–2930 Cooperative Education. 1–3 Credits

Women’s Studies (WMS)

History, Political Science, Geography and Anthropology Department
Marlboro Hall, Room 3078
301-322-0561

The Women’s Studies Option of General Studies is an interdisciplinary degree. It includes courses in English, health, history, psychology, and sociology that focus on women’s interests and needs.

WMS-1010 Introduction to Women’s Studies. 3 Credits SS
An interdisciplinary approach featuring recent scholarship on women, gender and feminist theory that critically examines assumptions about gender. The readings and assignments reflect women’s experiences with race, class and gender and provide information about women’s psychology, biology, roles, experiences, contributions and history. Prerequisite: Reading proficiency.

Work-Based Learning (WBL)

Career Services
Marlboro Hall, Room 2092
301-322-0136

WBL-2010 Preparation for Work-Based Learning. 1 Credit
Prepares students for participation in various work-based learning experiences, including internships, cooperative education and professional employment. Students will learn the skills and knowledge needed to obtain positions related to their academic disciplines, including resume preparation, communication and interviewing skills, job researching, evaluating job offers, workplace professionalism and on-the-job performance. Prerequisite: Reading proficiency.