Bunker Hill Community College

Summer 2015 Course Descriptions

Bunker Hill Community College
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As of April 7, 2015

BUNKER HILL COMMUNITY COLLEGE
SUMMER 2015 COURSE SCHEDULE

TABLE OF CONTENT

Bunker Hill Community College
Section Codes & Abbreviations

TERMS:	
2015S1	Summer Session I
2015S2	Summer Session II

TEACHING METHODS:	
LEC	Lecture
LAB	Laboratory
L/L	Lab Practicum and Lecture
HYB	Hybrid
WEB	Online
SEM	Seminar
CLIN	Clinical
GSS	Self-Guided Learning

DAYS OF THE WEEK:	
M	Monday
T	Tuesday
W	Wednesday
TH	Thursday
F	Friday
S	Saturday
SU	Sunday

COURSE LOCATIONS:	
CHAR	Charlestown
CHEL	Chelsea
HBLDG	H-Building
MLDN	Malden
ONLNE	Online
CSDL	Center for Self-Directed Learning

SESSION I:	
A1-A6	Charlestown Day
D1-D3	Chelsea Day
C1-C6	Charlestown Evening
EB	East Boston
LC	Center for Self-Directed Learning
F1-F4	Chelsea Evening
WB	Web Courses

SESSION II:	
B1-B6	Charlestown Day
E1-E3	Chelsea Day
G1-G3	Chelsea Evening
J1-J6	Charlestown Evening

BRIDGE SESSION:	
BD1-BD6	Charlestown Day
D5-D6	Chelsea Day
BE1-BE6	Charlestown Evening
F5-F6	Chelsea Evening

ACADEMIC ESL SESSION:	
K1-K6	Charlestown Day
KL1-L6	Charlestown Evening

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Summer 2015 Course Descriptions

Course	Long Title	Description	Credits
ACC-101	**Principles of Accounting I**	After a brief consideration of the meaning and purpose of accounting, this course explores the basic statements of an accounting system: the balance sheet, the income statement and the statement of owner's equity. Students will examine the accounting cycle with an emphasis on the methods of accumulating and summarizing data generated by business transactions. Students will apply their manual accounting skills to an automated accounting system using general ledger software. Areas of concentration will include adjusting entries, closing process, inventory analysis, merchandising, transactions, cash control procedures, receivables, and payables. Prerequisite: Academic Reading III (ESL098) or Reading Skills II (RDG095).	**3**
ACC-102	**Principles of Accounting II**	This course will expand upon the basic concepts and theories that students learned in the Principles of Accounting I course. Students will be expected to apply their knowledge in a managerial decision-making mode. Areas studied include, but not limited to, the following: examine long-term assets and liabilities; financial statement analysis; transactions unique to the corporate business structure; bonds payable; planning and controlling using master budgets and cost behavior recognition utilizing cost-volume analysis as well as gaining exposure to accounting for manufacturers. Prerequisite: Principles of Accounting I (ACC101).	**3**
ACC-107	**Accounting Forensics**	This course introduces students to the auditing process and prepares them to perform forensic audit and examination in conformity with pertinent industry standards. Students will learn comprehensive perspectives and skills in regards to occupational fraud and the technicality of fraud examination including searching accounting information, obtaining documentary evidence, interviewing witnesses and potential suspects, and conducting forensic document examination. This course will also provide electronic techniques required to audit. Prerequisite: Principles of Accounting II (ACC102).	**3**

ACC-201	**Intermediate Accounting I**	This course covers, in detail, financial accounting, and generally accepted accounting principles. After a review of the accounting cycle, issues in revenue recognition and the time value of money are discussed. The four main financial statements are studied. Specific accounting issues pertaining to various current assets are covered. Prerequisite: Principles of Accounting II (ACC102).	**3**
ACC-203	**Federal Income Tax I**	This course provides a comprehensive explanation of tax principles dealing with individuals and small businesses. The course covers modules in federal and state income tax processes, concepts, and applications as well as other topics. Prerequisite: Principles of Accounting II (ACC102).	**3**
ACC-210	**Financial Management**	This course uses the tools of financial analysis such as ratios, budgets, forecasting techniques, present value concepts, and cash flow. The course also explores short, intermediate, and long-term sources and uses of cash. Prerequisite: Principles of Accounting II (ACC102).	**3**
ACC-299	**Mass Dept. of Revenue Internship**	This course enhances the academic experience for students. All internships take place at the Massachusetts Department of Revenue site. Students will engage in activities that improve knowledge of the practical world of taxation and auditing and help them gain professional experience. The internship experience applies resources gained from students' program of study to improve the quality of their contributions to the employer. Students are responsible for following all guidelines in the BHCC Internship Handbook. Prerequisite: Mass Tax Law I (ACC217) and permission of the Department Chair or Dean.	**3**
AHE-201	**Advanced Clinical Skills**	This course covers advanced theory and skills for the patient care technician and medical assistant. Students are cross-trained in EKG and Phlebotomy. Prerequisite: Patient Care Skills (AHE111) or Medical Assisting Skills (AHE112).	**3**
AHE-204	**Patient Care Technician**	This course consists of a clinical practicum at local health care facilities. Students keep a daily journal and complete a work portfolio. Additional expenses may include supplies, equipment, and/or uniforms. Prerequisite: Patient Care Skills (AHE111). Co-requisite: Advanced Clinical Skills (AHE201).	**3**

AHE-205	**Practicum Medical Assistant**	This course consists of a clinical practicum at local health care facilities. Students keep at daily journal and complete a work portfolio. Additional expenses may include AHE 206 Prerequisite: Medical Assisting Skills (AHE112).Co-requisite: Advanced Clinical Skills (AHE201).	**3**
AHE-209	**Allied Health Practicum Seminar**	This seminar is an inter-disciplinary course that provides a broad overview of the medical workplace. Taken concurrently with an Allied Health Practicum, it includes discussions of the internship experience, employment opportunities as well as job search skills. Co-requisite: Practicum Patient Care Assistant (AHE204) or Practicum Medical Assistant (AHE205) or Practicum Phlebotomy Technician (AHE206) or Practicum Laboratory Assistant (AHE207).	**1**
AHE-299	**Medical Interpreting Internship**	Students will be placed in a 30-hour internship to be completed over the course of the semester at a local healthcare facility under the direct supervision of a professional interpreter and mentor. This internship will consist entirely of active interpreting. Co-requisite: Medical Interpreting II (AHE102).	**1**
BIO-105	**Introduction to Biology**	This course will investigate the major biological concepts that connect all forms of life and are designed for students with little or no background in science. Topics will include the process of scientific inquiry, the cell as the basic unit of life, metabolism, cellular reproduction, genetics, evolutionary theory and principles of ecology. Laboratory work will introduce students to the basic investigative techniques used to study life's processes. There will be no animal dissection in this course. This course will satisfy the General Education Science & Technology Area 5 requirement for all programs and may be used to satisfy the biology prerequisite for Anatomy and Physiology I (BIO203). This course will not satisfy the general biology requirement of the Associate in Science: Biological Science program. Prerequisites: Writing Skills (ENG095), a grade of C or better in Foundations of Mathematics (MAT093), and Reading Skills II (RDG095) or placement equivalence.	**4**

BIO-108	**Human Biology/Lab**	This course is designed to introduce students pursuing careers in the health fields to the structure and function of the human body. It is intended to help students with a limited scientific background grasp the fundamental concepts of biology as well as human anatomy and physiology. Pathophysiology, genetics and relevant clinical aspects are discussed with each system so that students can apply their clinical learning. This course does not substitute for programs that require BIO203 and BIO204. Open to all students and satisfies General Education "Science and Technology" Requirement Area 5. Course meets 3 hrs. lecture; 1.5 hrs. lab. Note: May be used as a prerequisite for Anatomy & Physiology I/Lab (BIO203). Prerequisites: Writing Skills II (ENG095), a grade of C or better in Foundations of Mathematics (MAT093), and Reading Skills II (RDG095) or placement equivalent.	**4**
BIO-111	**Food/Nutrition**	This course covers a study of plant and animal sources of human food, their nutritional values, and the way they are utilized by the body in health and disease. Topics include the selection of an adequate diet, evaluation of nutrition status, nutrition in pregnancy and lactation, nutrition in infancy and in aging, weight control, alternate food patterns, ethnic foods, and nutrition-related health problems. The department recommends this course for students in Allied Health programs. The course is offered in the Center for Self-Directed Learning only.	**3**
BIO-115	**Nutrition Science & Lab**	This course covers a study of plant and animal sources of human food, their nutritional values, and the way they are utilized by the body in health and disease. Topics include chemistry and biology of food, personal nutrition evaluation, nutrition-related health problems, and global food and nutrition issues. Laboratory exercises introduce students to the diagnostic procedures used by nutritionists and to reinforce learning of nutritional theory. A background in biology or chemistry is not required. The course meets General Education "Science and Technology" Requirement Area 5. Course meets: 3 hrs. lecture; 1.5 hrs. lab. Prerequisites: Writing Skills II (ENG095), a grade of C or better in Foundations of Mathematics (MAT093), Academic Reading III (ESL098) or Reading Skills II (RDG095) or placement equivalency.	**4**

BIO-120	**Introduction to Biotechnology**	This course offers an introduction to the field of biotechnology designed for students in all programs of study. General principles of biology, their applications in biotechnology and the concepts and work practices of the biotechnology industry will be presented. The medical, social, political, and ethical implications of recombinant DNA technology and the Human Genome Project will be discussed. Career opportunities in biotechnology will also be presented. Students will be introduced to basic investigative techniques and procedures used in Biotechnology research. Labs are designed to reinforce lecture concepts. This course meets General Education Science and Technology Requirement Area 5. Course meets: 3 hrs. lecture; 1.5 hrs. lab. Prerequisites: Writing Skills II (ENG095), Foundations of Mathematics (MAT093), and Reading Skills (RDG095) or placement equivalency.	**4**
BIO-195	**General Biology I & Lab**	The course will examine the cell as the basic unit of life. Topics will include cell chemistry, cell structure and function, metabolism, cellular respiration, photosynthesis, and cell division. The course will conclude with an examination of the genetic and chromosomal basis of inheritance. Laboratory work will provide students with the basic skills necessary to work in advanced biology laboratory courses. This is the first required biology course in the AS Biological Science program. Students planning to enroll in a health science program should enroll in Principles of Biology I/Lab (BIO101) or Human Biology/Lab (BIO108). This course meets General Education Science and Technology Requirement Area 5.Prerequisites: Writing Skills II (ENG095) and Reading Skills II (RDG095) or placement and a grade of C or better in College Algebra-STEM (MAT194).	**4**

BIO-196	**General Biology II & Lab**	As a continuation of General Biology I/Lab (BIO195), the course begins with a study of chemical basis of inheritance and protein synthesis. The course then investigates the mechanisms of adaptive evolution, speciation, phylogeny and the history of life on earth. The course concludes with a survey of the three domains of life and an introduction to the structure of populations and ecosystems. Laboratory work will continue to develop the student's critical thinking and problem solving skills. Prerequisite: Grade of C or better in General Biology I/Lab (BIO195).	**4**
BIO-203	**Anatomy/Physiology I & Lab**	This is the first course in a two-semester sequence that will examine the systems of the human body using an integrated approach. Areas of study will include the structure and function of cells, histology, the physiological and anatomical aspects of support and movement systems and the nervous system. Laboratory activities will enhance the students' comprehension of the structure and function of the human body. Course meets: 3 hrs. lecture; 3 hours. Lab. Prerequisite: Grade of C or better in Principles of Biology I/Lab (BIO101), Human Biology (BIO108) or General Biology I/Lab (BIO195).	**4**
BIO-204	**Anatomy/Physiology II & Lab**	As a continuation of Anatomy/Physiology I (BIO203) this course will again use an integrated approach to examine the human systems not covered in Anatomy/Physiology I. Areas of study will include the endocrine system, the cardiovascular system, lymphatic and immune systems, respiratory system, digestive system, urinary system and reproductive system. Laboratory activities will enhance the students' comprehension of the structure and function of the human body. Course meets: 3 hrs. Lecture; 3 hrs. lab. Prerequisite: Grade of C or better in Anatomy/Physiology I/Lab (BIO203).	**4**

BIO-205	**Microbiology & Lab**	This course is intended for students entering health care careers and the biotechnology industry. This course will provide a solid foundation of basic physiological and biochemical activities of bacteria, viruses, fungi, and protozoa. The fundamentals of microbial physiology, genetics, and immunology will be presented with emphasis placed on virulence factors and the mechanisms in which these microorganisms establish disease. Microbiology in the workplace will be covered through a discussion of methods of physical and chemical control of microorganisms, microbial growth and enumeration. The use of anti-viral drugs, and antibiotics, the host immune response to infection, and the effectiveness of various vaccination strategies will also be discussed. The course will be completed by investigating the importance of human pathogens in patient care and nosocomial infection while looking at several major diseases. Exercises in the laboratory portion of the course deal with aseptic techniques, microbial cultivation and growth characteristics, staining and bacterial isolation techniques, differential biochemical tests, identification of unknown bacterial species, and testing effectiveness of antimicrobial agents. Course meets 3 hrs. lecture and 3 hrs. lab. Prerequisite: Anatomy and Physiology I/Lab(BIO203) or General Biology I/Lab (BIO195) or admission to the Nursing Program.	**4**
BIO-208	**Genetics and Lab**	This course offers a broad understanding of classical, molecular and evolutionary genetics. Highlighted topics will include the molecular and chromosomal basis of inheritance, extra nuclear inheritance, gene mapping and analysis, control of gene expression in pro- and eukaryotes, Chi square analysis, probability theory, DNA mutation and repair, genetics of cancer, population and human genetics. Experimental work will focus on the theory and practice of current techniques in genetics. Prerequisite: A grade of C or better in General Biology II/Lab (BIO196) or permission of science and engineering department.	**4**

BUS-101	**Introduction to Business**	This course is a survey of the purpose, role, and responsibility of business in a capitalistic society, including an introduction to the major areas of business such as: Finance, Management, Economics and Marketing. This course provides a basic foundation for the student who will specialize in some aspect of business in college, and it also provides the opportunity for non-business majors to learn about the business in which they will someday be both producers and consumers. This course will also enable students to explore career options in business, define a career path, and make connections between classroom learning and the larger business community. This course will fulfill the Learning Community Seminar requirement for first time, full-time students, to assist the student in making a successful transition from our unique urban community into an academic environment. The course will aid students in learning insights, skills, and attitudes necessary to develop academic success strategies for personal and career goals achievement. Prerequisites: Grade of C or better in Academic Reading I (ESL098) and Academic Writing III (ESL099) or Reading Skills II(RDG095)and Writing Skills (ENG090) or exemption by placement testing.	**3**

BUS-111	**Globalization**	This course is an exploration of the nature, reasons for and consequences of globalization. Subjects such as global economic integration, cultural convergence, global institutions, multinational corporations and global business will be discussed. Students will acquire an understanding of globalization's key aspects and trends in history, geography, politics, culture, and technology, as well as its impact on labor, standards of living and the environment. This course will also enable students to explore career options in international business, define a career path, and make connections between classroom learning and the larger business community. This course will fulfill the learning community seminar requirement for first time, full time, students, to assist the student in making a successful transition from our unique urban community into an academic environment. The course will aid students in learning insights, skills, and attitudes necessary to develop academic success strategies for personal and career goals achievement. Prerequisites: A grade of C or better in Academic Reading (ESL098) and Academic Writing III (ESL099) or Reading Skills II (RDG095) and Writing Skills I (ENG090) or placement.	**3**
BUS-201	**Business Law I**	In this introductory study of the law and its application to the individual, students learn to evaluate and analyze legal problems and systems. The course emphasizes business situations. Topics include procedural law, contracts, torts, consumer law and related areas. Prerequisites: Writing Skills II (ENG095) or placement and Academic Reading Skills III (ESL098) or Reading Skills II (RDG095) or placement.	**3**
BUS-207	**Professional Communication**	This course gives students a comprehensive understanding of the use and importance of effective communication in business. Students study types of written, oral, and electronic communication and develop a variety of professional communication skills essential to success in business. The course also addresses ethical and cultural issues associated with business communications. Prerequisite: Grade of C or better in College Writing I (ENG111).	**3**

CHM-120	**Principles of Inorganic Chemistry & Lab**	This course is an introduction to the basic concepts of inorganic chemistry. Topics include measurement theory, methods of scientific investigation, atomic theory, nuclear radiation, compound formation, chemical nomenclature, chemical reactions, the mole concept, solution chemistry, acid-base chemistry, and the relevance of chemistry in health professions. Laboratory work will introduce students to basic laboratory techniques, safety regulations, and chemical hygiene. This course does not satisfy the chemistry requirement of the AS Biological Sciences or AS Engineering programs or the AA Chemistry/Physics concentrations. Course meets 3 hrs. lecture; 3 hrs. lab. Prerequisites: Writing Skills II (ENG095), Reading Skills II (RDG095), and Foundations of Algebra (MAT097) or placement equivalencies.	**4**
CHM-121	**Principles of Organic & Chemistry W/Lab**	This course serves as an introduction to organic and biochemistry. The naming and reactivity patterns of common organic functional groups will be presented. A study of biochemistry will introduce students to the chemical structures and reactions of lipids, carbohydrates, proteins, and nucleic acids and their role in metabolism. The standard length three hour laboratory session will serve to reinforce the concepts discussed during lectures and will provide students with practical experience in organic synthesis reactions and organic compound identification methods. This course does not satisfy the Organic Chemistry requirement of the AA Chemistry Concentration. Prerequisites: Grade of C or better in Chemical Science I & Lab (CHM110) or Principles of Inorganic Chemistry & Lab (CHM120).	**4**
CHM-151	**Basic Chemistry (Non-Lab)**	This course is an introduction to basic concepts of inorganic chemistry. The course is designed primarily for students who have not previously studied chemistry. Topics, which are presented in a multi-media, modular format, include measurement, chemical symbols and equations, physical and chemical properties, atomic structure, chemical compounds, solutions, and an overview of chemical reactions. The course is offered in the Center for Self-Directed Learning only. Prerequisite: A grade of C or better in Foundations of Algebra (MAT097).	**3**

CHM-201	**General Chemistry I & Lab**	This course is a rigorous introductory course as part of a two-semester sequence that studies chemical principles. Topics include atomic structure, reaction types and equations, stoichiometry, gas laws, thermochemistry and bonding theory. Students are required to purchase approved safety goggles. Course meets: 3 hours lecture; 3 hours lab. Prerequisites: Grade of C+ or better in Precalculus (MAT197) or exemption by placement testing and a grade of C or better in College Writing I (ENG111). Note: This course is intended for students planning to major or transfer as science or engineering majors. Pre-allied health students or students requiring a one semester overview of chemistry should enroll in Principles of Inorganic Chemistry & Lab (CHM120).	**4**
CHM-202	**General Chemistry II & Lab**	This course is a continuation of General Chemistry I and Lab (CHM201). Topics include solids, solutions, kinetics, equilibrium, acid-base and solubility equilibrium, thermodynamics and electrochemistry. Students are required to purchase approved safety goggles. Course meets: 3 hours lecture; 3 hours lab. Prerequisite: Grade of C or better in General Chemistry I and Lab (CHM201).	**4**

CIT-101	**Computer Essentials**	This introductory course is intended for students with little to no computer experience. Students in developmental mathematics, reading and English as well as English as a Second Language (ESL) should consider this for their first computer course. This course starts with an introduction to the Windows environment and covers operating system topics appropriate for beginners, keyboarding, document processing and productivity skills necessary to function in today's electronic office environment. The course teaches students other skills necessary to use a personal computer as a tool for academic success. Utilizing the college's computer laboratories students get extensive "hands-on" personal computer experience in MS WORD as well as E-Mail, INTERNET, and World Wide Web (WWW) access and use. Students emerge from this course with an understanding of essential computer concepts and terminology, use and application of the INTERNET, keyboarding proficiency, and a high degree of competence with personal computer hardware and software. All Learner Outcomes and Competencies in this course are based on accepted, published ICT Industry Standards. For additional information and/or a course syllabus contact CITDepartment@bhcc.mass.edu.	**3**

CIT-110	**Applications/Concepts**	This survey course covers the use and application of modern computer systems. This course includes detailed coverage of fundamental computer concepts, terminology, applications, and theory. Students will get extensive 'hands-on' personal computer experience and gain a good working knowledge of MS WINDOWS and MS OFFICE. Upon completion of this course, students will have a grasp of important computer concepts and terminology, an understanding of INTERNET use and applications, a high degree of competence with personal computer hardware and software, as well as an understanding of the effects of information technology on the individual, organizations, and society. All Learner Outcomes and Competencies in this course are based on accepted, published ICT Industry Standards. Students with prior learning experience may test-out of this course by contacting pla@bhcc.mass.edu. Prerequisite: Reading Skills II (RDG095) or Academic Reading III (ESL098) or exemption from reading requirement by placement testing or enrollment in an integrated course. For additional information and/or a course syllabus contact CITDepartment@bhcc.mass.edu.	**3**

CIT-113	**Information Technology Problem Solving**	This course will give students "hands-on" experience in a wide-range of modern information technology. Several IT concepts will be introduced that will provide a basis for further study in Information Technology. Students will work on a number of projects that will give perspectives on areas of IT including but not limited to: visual and/or robotic programming, social networking tools, web design and networking. Issues of security, privacy and ethics will also be examined. Students will leave the course with an understanding of the components of modern IT systems and the scope of knowledge needed to become an IT professional. Students are expected to have access to computer with internet access outside of class as there is a major web component to the course. Designed for first-time, full-time Computer Technology students, this course will fulfill the Learning Community Seminar requirement for the Computer Information Technology Department. First year students registering for this course should not register for Computer Applications/Concepts (CIT110). This course is not for Computer Science Transfer, Gaming or Web majors. Prerequisites: Grade of C or better in Reading Skills I (RDG090) and Writing Skills I (ENG090) or placement.	**3**

CIT-118	**Principles of Internet & Info Security**	This is a course in Internet and Information Security which introduces students to all major areas related to securing both personal and organizational information in the "Internet Age". Beginning with an introduction to physical and electronic security issues, students proceed to explore the legal, ethical and professional issues in information and Internet security. Topics covered include, but are not limited to, identity theft, phishing and other email scams, personal and corporate firewalls, spyware and virus scanning software, chat rooms, Internet crimes against children, cyber predators, digital computer forensics, wired and wireless home & organization networks, cyber terrorism, and cyber vandalism. Students gain practical experience in Internet security considerations through a capstone Security Project. Students completing the course also attain the i-SAFE.Org certification. Prerequisite: Applications/Concepts (CIT110) or IT Problem Solving CIT113) or Introduction to Computer Science & OOP (CIT120), equivalent experience or permission of the department chairperson. For additional information and/or a course syllabus contactCITDepartment@bhcc.mass.edu.	**3**

CIT-120	**Intro to Computer Science and Object Oriented Programming**	This is a first course in Object Oriented Programming (OOP) theory, logic and design. Taught in the College's "hands-on" computer classrooms, this course emphasizes the program design and development process including concepts of variables and flow control, objects, classes, methods and polymorphism. Students will use an Object Oriented Programming language as they design code, debug and implement several programs covering the topics presented. Students taking this course are expected to have solid knowledge of basic computer terminology, internet navigation and email, operating system and file management skills. Strong analytical skills are recommended for students enrolling in this course. Please note that this course is a four credit course with six contact hours and analogous homework. This course fulfills the Learning Community Seminar requirement for students in AA Computer Science, AS Computer Science, and AS Computer Engineering areas of study. Other departments may allow this course to be used as a learning community seminar for their students. Students in majors other than the ones listed above should obtain their advisor's or the leading faculty members approval before registering in the course. Prerequisites: Intermediate Algebra (MAT099), Writing Skills II (ENG095), and Reading Skills II (RDG095) or placement. Pre/corequisite: College Algebra-STEM (MAT194). For additional information and/or a course syllabus contact CITDepartment@bhcc.mass.edu.	**4**

CIT-128	**Database Design with MS Access**	This is a comprehensive course in the use and application of computers in database applications based on the most current version of Microsoft Access. The course covers all aspects of database design including entity relationship modeling, tables, reports, queries, forms and other database objects. All key MS Access functionality including Internet applications, integration with the Web and other software programs are covered. Students gain some experience using Structured Query Language (SQL) and Visual Basic for Applications (VBA) in the final component of the course. Microsoft Corporation has approved this course material as courseware for the Microsoft Business Certification (MBC) Program and students may choose to take the MBC ACCESS Certification Examination upon completion of this course. Prerequisite: Applications/Concepts (CIT110)or IT Problem Solving (CIT113) or Introduction to Computer Science & OOP (CIT120), equivalent experience or permission of the department chairperson. For additional information and/or a course syllabus contact CITDepartment@bhcc.mass.edu.	**3**
CIT-133	**Introduction to Microsoft Office**	This introductory course covers the use and application of integrated PC applications software based on the most current version of Microsoft Office. The course initially covers the MS Windows skills necessary to complete the course. Using the hands-on college computer laboratory, the course covers the following applications in detail: Word Processing, Spreadsheet, Database, Presentation Graphics and Desktop Information Management. The course emphasizes Internet applications relating to MS Office. It also covers integration among the MS Office Applications. Microsoft Corporation has approved this course material as courseware for the Microsoft Business Certification (MBC)Program and students may choose to take the MBC Certification Examination(s) upon completion of this course. For additional information and/or a course syllabus contact CITDepartment@bhcc.mass.edu.	**3**

CIT-162	**Introduction to Networking**	This course introduces students to fundamental networking concepts and technologies. The material in this course encompasses a broad range of technologies that facilitate how people work, live, play, and learn by communicating with voice, video and other data. First, you will examine human versus network communication and see the parallels between them. Next, you will be introduced to the two major models used to plan and implement networks: OSI and TCP/IP. You will gain an understanding of the "layered" approach to networks and examine the OSI and TCP/IP layers in detail to understand their functions and services. You will become familiar with the various network devices, network addressing schemes and, finally, the types of media used to carry data across the network. In this course, you will gain experience using networking utilities and tools, such as Packet Tracer and Wireshark, to explore networking protocols and concepts. These tools will help you to develop an understanding of how data flows in a network. A special "model Internet" is also used to provide a test environment where a range of network services and data can be observed and analyzed. Prerequisite: Computer Applications/Concepts (CIT110) or Information Technology Fundamentals (CIT112) or IT Problem Solving (CIT113) or Intro to Computer Science & Object Oriented Programming (CIT120) or permission of the department chair. For additional information and/or a course syllabus contact CITDepartment@bhcc.mass.edu.	**3**

CIT-167	**Routers and Routing Basics**	The primary focus of this course is on routing and routing protocols. The goal is to develop an understanding of how a router learns about remote networks and determines the best path to those networks. This course includes both static routing and dynamic routing protocols. By examining multiple routing protocols, you will gain a better understanding of each of the individual routing protocols and a better perspective of routing in general. Learning the configuration of routing protocols is fairly simple. Developing an understanding of the routing concepts themselves is more difficult, yet is critical for implementing, verifying, and troubleshooting routing operations. Each static routing and dynamic routing protocol chapter uses a single topology throughout that chapter. You will be using that topology to configure, verify, and troubleshoot the routing operations discussed in the chapter. The labs and Packet Tracer activities used in this course are designed to help you develop an understanding of how to configure routing operations while reinforcing the concepts learned in each chapter. Prerequisite: Introduction to Networking (CIT162). For additional information and/or a course syllabus contact CITDepartment@bhcc.mass.edu.	**3**
CIT-182	**PC Hardware & Software**	This course provides an excellent, interactive exposure to personal computers, hardware, and operating systems. Students completing this course will be able to describe the internal components of a personal computer, assemble a system, install an operating system, and troubleshoot using system tools and diagnostic software. They will also be able to connect computers to the Internet, share resources in a networked environment and develop greater skills and confidence in working with desktop and laptop computers. Students participate in "hands-on" activities and lab-based learning to become familiar with various hardware and software components and discover best practices in maintenance and safety. Topics covered include: laptops and portable devices, wireless connectivity, security, safety and environmental issues. Standalone virtual learning tools supplement classroom instruction and provide opportunities for interactive "hands-on" learning. For additional information and/or a course syllabus contact CITDepartment@bhcc.mass.edu.	**3**

CIT-234	**Decision Support Using MS Excel**	This comprehensive course covers the use and application of Decision Support using spreadsheet software based on the most current version of Microsoft Excel. The applications include basic spreadsheet operations, charting, web queries, multiple sheet workbooks, macros, advanced functions and data base features. The course emphasizes applications involving financial decision-making, financial planning and "what-if" analysis as they relate to various business and organizational models. Internet applications of MS Excel and integration of the other MS Office programs are also covered. Microsoft Corporation has approved this course material as courseware for the Microsoft Business Certification (MBC) Program and students may choose to take the MBC EXCEL Certification Examination upon completion of this course. Prerequisite: Applications/Concepts (CIT110)or Introduction to Computer Science & OOP (CIT120) or equivalent. experience or permission of the department chairperson. For additional information and/or a course syllabus contact CITDepartment@bhcc.mass.edu.	**3**
CIT-236	**SQL Programming**	This course introduces students to the fundamentals and functions of Structured Query Language (SQL), including relational database, table creation, updating, and manipulation concepts. Using a live data base, students learn SQL basics and then move on to the more sophisticated and challenging aspects of SQL. Students get in-depth knowledge of the language through extensive use of Internet based, industry standard SQL programming and certification testing engines. Upon completion of this course, students have the skills and competencies required to program in SQL and the background necessary to continue to intermediate and advanced courses in database procedural programming and database administration. Prerequisite: Computer Applications/Concepts (CIT110) or IT Problem Solving (CIT113) or Introduction to Computer Science and Object Orient Programming (CIT120), or permission of the department chairperson. For additional information and/or a course syllabus contactCITDepartment@bhcc.mass.edu.	**3**

CIT-237	**C++ Programming**	In this course, students who already have been exposed to programming and Object Oriented thinking, develop the ability to correctly analyze a variety of problems and generate appropriate algorithmic solutions using the C++ Programming Language. The course emphasizes the principles of top-down structured design and Object Oriented thinking. Topics include but are not limited to branching and looping mechanisms; arrays, functions and function overloading, arguments by reference and by value as well as optional arguments; recursion; pointers, creating libraries and namespaces, structures and classes, constructors and other methods, overloading operators; file I/O; inheritance and polymorphism. Strong analytical skills are recommended for students enrolling in this course. Prerequisite: Writing Skills II (ENG095), College Algebra-STEM (MAT194) and Introduction to Computer Science & Object Oriented Programming (CIT120) with grade C or better or equivalent experience with permission of the department chairperson. For additional information and/or a course syllabus contact CITDepartment@bhcc.mass.edu. All prerequisites must be completed with a C or better.	**4**

CIT-239	**JAVA Programming**	In this course, students who already have been exposed to programming and Object Oriented thinking, develop the ability to correctly analyze a variety of problems and generate appropriate algorithmic solutions using the Java Programming Language. The course emphasizes the principles of top-down structured design and Object Oriented thinking. Topics include but are not limited to branching and looping mechanisms; arrays, functions and function overloading, arguments by reference and by value as well as optional arguments; recursion; creating packages, structures and classes, constructors and other methods, file I/O; inheritance and polymorphism. Strong analytical skills are recommended for students enrolling in this course, plus familiarity and experience working with the Internet and basic HTML tags. The course covers creating both Java Applications and Java Applets including event handling, animation, and audio. Prerequisite: Writing Skills II (ENG095), College Algebra-STEM (MAT194) and Introduction to Computer Science & Object Oriented Programming (CIT120)with grade C or better or equivalent experience with permission of department chairperson. For additional information and/or a course syllabus contact CITDepartment@bhcc.mass.edu.	**4**
CIT-242	**Data Structures**	This course prepares students to understand the fundamentals of data structures with an emphasis on software engineering. Topics include multidimensional arrays, records, dynamic memory allocation, stacks, queues, lists, trees, graphs, and others. The department strongly recommends that students achieve a grade of B- or better in Java Programming (CIT239). Prerequisite: Java Programming (CIT239) and Precalculus (MAT197). For additional information and/or a course syllabus contact CITDepartment@bhcc.mass.edu.	**3**

CIT-250	**Collaboration Communication & Integrating**	This is a course in modern office technology which introduces students to all major areas of personal and organizational collaboration, communication and integration of MS OFFICE applications. Building on students' basic knowledge of the most current version of the core MS OFFICE applications, the course proceeds to cover in detail, the integration among OFFICE applications including Object Linking & Embedding (OLE),On-Line Meeting, document sharing, and the other collaboration features of MS OFFICE. Using WORD as the "core" application, students gain practical experience in moving and linking data among all applications: WORD, EXCEL, ACCESS, POWERPOINT and OUTLOOK. Advantages and limitations of Voice over IP (VoIP) and video conferencing, along with the importance of security and other considerations involved in implementing these technologies are also covered. Students also gain experience in web enabling and publishing as well as knowledge of the principles, best practices, procedures and techniques used in implementing all of these applications in offices large and small. Microsoft Corporation has approved this course material as courseware for the Microsoft Business Certification (MBC) Program and students may choose to take the MBC Certification Examination(s) upon completion of this course. Prerequisite: Computer Applications/Concepts (CIT110) or IT Problem Solving (CIT113) or equivalent course or experience or permission of department chairperson. For additional information and/or a course syllabus contact CITDepartment@bhcc.mass.edu.	**3**

CIT-264	**Networking Security**	The goal of this course is to provide you with a fundamental understanding of network security principles and implementation. You will learn about the technologies used and principles involved in creating a secure computer networking environment. You will learn about the authentication, the types of attacks and malicious codes that may be used against your network, the threats and countermeasures for e-mail, Web applications, remote access, and file and print services. A variety of security topologies are discussed as well as technologies and concepts used for providing secure communications channels, secure internetworking devices, and network medium. Further, you will learn about intrusion detection systems, firewalls, and physical networking security concepts. In addition, security policies, disaster recovery, and computer forensics are covered. Aside from learning the technologies involved in security, you will get to understand the daily tasks involved with managing and troubleshooting those technologies. You will have a variety of hands-on and case project assignments that reinforce the concepts you read in each chapter. Prerequisite: Introduction to Networking (CIT162).	**3**

CIT-267	**Switching Basics & Intermediate Routing**	The goal of this course is to develop an understanding of how switches are interconnected and configured to provide network access to LAN users. This course also teaches how to integrate wireless devices into a LAN. The primary focus of this course is on LAN switching and wireless LANs. The goal is to develop an understanding of how a switch communicates with other switches and routers in a small- or medium-sized business network to implement VLAN segmentation. This course focuses on Layer 2 switching protocols and concepts used to improve redundancy, propagate VLAN information, and secure the portion of the network where most users access network services. This course will go to great lengths to explain the underlying processes of the common Layer 2 switching technologies. The better the underlying concepts are understood, the easier it is to implement, verify, and troubleshoot the switching technologies. Each switching concept will be introduced within the context of a single topology for each chapter. The individual chapter topologies will be used to explain protocol operations as well as providing a setting for the implementation of the various switching technologies. The labs and Packet Tracer activities used in this course are designed to help you develop an understanding of how to configure switching operations while reinforcing the concepts learned in each chapter. Prerequisite: Routers and Routing Basics (CIT167).For additional information and/or a course syllabus contact CITDepartment@bhcc.mass.edu.	**3**

CIT-268	**Windows Operating Systems**	This course provides students with in-depth, hands-on experience with the most commonly used versions of the Windows operating systems. Students gain experience using system file managers, utilities, set-up procedures, and other major components of the operating systems. In addition, the course emphasizes gaining an understanding of device drivers, link libraries, memory management, multi-tasking requirements, and multi-media considerations. Upon completion of the course, students have a high degree of competence in the application and use of these Windows operating systems such as Windows, DOS, and Linux. Prerequisites: Computer Applications/Concepts (CIT110), IT Problem Solving (CIT113) or Intro to Computer Science/Object Oriented Programming (CIT120) or permission of the department chairperson. For additional information and/or a course syllabus contact CITDept@bhcc.mass.edu.	**3**

CIT-274	**WAN Technologies**	The primary focus of this course is on accessing wide area networks (WAN). The goal is to develop an understanding of various WAN technologies to connect small- to medium-sized business networks. The course introduces WAN converged applications and quality of service (QoS). It focuses on WAN technologies including PPP, Frame Relay, and broadband links. WAN security concepts are discussed in detail, including types of threats, how to analyze network vulnerabilities, general methods for mitigating common security threats and types of security appliances and applications. The course then explains the principles of traffic control and access control lists (ACLs) and describes how to implement IP addressing services for an Enterprise network, including how to configure NAT and DHCP. IPv6 addressing concepts are also discussed. During the course, you will learn how to use Cisco Router and Security Device Manager (SDM) to secure a router and implement IP addressing services. Finally, students learn how to detect, troubleshoot and correct common Enterprise network implementation issues. The labs and Packet Tracer activities used in this course are designed to help you develop an understanding of how to configure routing operations while reinforcing the concepts learned in each chapter. Prerequisite: Switching Basics & Intermediate Routing (CIT267). For additional information and/or a course syllabus contact CITDepartment@bhcc.mass.edu.	**3**

CIT-277	**Health Information Networking**	The Cisco Health Information Networking course, offered through the BHCC Cisco Networking Academy, is a technology-focused curriculum primarily designed for students who are looking for career-oriented, entry-level healthcare focused skills that can be applied toward entry-level specialist careers in healthcare networking. Health Information Networking is a blended curriculum with both online and classroom learning. The program aims to develop an in-depth understanding of principles and practicalities needed for information technology professionals wishing to specialize in healthcare network implementations. Topics include: basic information on healthcare settings, Principles of security and privacy in healthcare, fundamentals of information technology in healthcare, fundamentals of electronic health records systems, basic information on medical practice workflows, how to adjust workflows for electronic medical record implementations, and designing, securing and troubleshooting a network to support a medical group. Prerequisite: Routers and Routing Basics (CIT167). For additional information and/or a course syllabus contact CITDepartment@bhcc.mass.edu.	**3**
CIT-279	**Cisco CCNA Security**	This course equips students with the knowledge and skills needed to prepare for entry-level security specialist careers and prepare for the CCNA Security certification. This course is a hands-on, career-oriented e-learning solution that emphasizes practical experience. CCNA Security aims to develop an in-depth understanding of network security principles as well as the tools and configurations available. The following tools are covered: Protocol sniffers/analyzers; TCP/IP and common desktop utilities; Cisco IOS Software; Cisco VPN client; Packet Tracer (PT); and Web-based resources. Prerequisite: Routers and Routing Basics (CIT167). For additional information and/or a course syllabus contact CITDepartment@bhcc.mass.edu.	**3**

CMT-111	**HTML & Dreamweaver**	This course teaches the student the principles and concepts of designing and creating WEB pages in an HTML format. The course is designed to expose the student to the constructs of HTML tags, the attribute modification of HTML tags, the incorporation of CSS tags, CSS pseudo tags, dynamic effects using styles, and class assignments. Additionally, the course will teach the student the utilization of graphics and dynamic graphics used in Web design. Also included will be content presentation control via HTML tables, HTML layers, and HTML frames. The course will explore the requirements, tools and controls used in WEB page development by lecture, in-class practical exercises and home study exercises. The course will also teach the student to create WEB sites using Dreamweaver as a state-of-the-art web authoring tool to enable rapid deployment of WEB development projects.	**3**
CMT-119	**The Human Character**	This course will present concepts in the creation of 3D human character and object modeling using detailed structures based on polygon modeling design tools such as patch modeling, image planes, planar projections, and curve projections. This course will also cover in-depth NURBS modeling of 3D characters and conversion from NURBS to polygonal. These skills are requisite skills for the successful design and implementation of 3D game design and computer simulation projects. Most of these techniques were employed in the Sony Pictures animated short film "The ChubbChubbs". Prerequisite: Game Development Essentials (CMT101).	**3**

CMT-125	**Cascading Style Sheets**	This course will cover the incorporation of modern web design controls for the formatting, placement, dynamics, interactive functionality, and animation web page content with CSS. CSS is the primary technology in use today in the fast paced world of web design and is used to present web content in a standardized manner that far exceeds the capabilities of the HTML language. CSS is in use in almost every one of the millions of web pages published in today's world and is a multi-browser, multi-language coding technology. CSS is found at all levels of the web design process and lends itself being incorporated as an in-line component, and embedded component, and a remote component on every HTML, JavaScript, XML, ASP.net, PHP, and Ruby pages written. It is prevalent and used in IEExplorer, Firefox, Mozilla, Safari, Opera, and Netscape browsers. CSS can be used to create a myriad of functions from the simple coloring of text content to the dynamics of drop-down expandable menus to the inclusion of voice content. It is a technology that has rapidly replaced the traditional name-pair attribute coding scheme of the previous web design technology. Corequisite HTML & Dreamweaver (CMT111).	**3**
CRJ-101	**Introduction to Criminal Justice**	A survey of the history, development and the role of American Criminal Justice System are presented. Included are the organizations and jurisdictions of the various agencies, a review of the court process, professional orientation, and the current trends in the criminal justice system. The course will offer students the ability to use state of the art technology and interactive instruction. It stresses the application of knowledge learned to real-life situations. Ethical behavior issues will be raised and students will develop strategies to set boundaries, understand differences among people, develop professional codes of conduct and behavior, and develop a professional moral code of conduct. The course fulfills the Learning Community Seminar requirement for students in AS Criminal Justice. Prerequisites: Writing Skills II (ENG095), Academic Reading III (ESL098) or Reading Skills II (RDG095), or placement.	**3**

CRJ-102	**Delinquency, Adjudication, & Correction**	This course examines the causative factors in the development of youthful offenders, the civil and new criminal procedures used in juvenile court, and the history of the development of the juvenile courts and juvenile justice. The course presents an overview of the institutional response to the problems of juvenile delinquency, along with status offenders, gender specific offenders, special needs offenders and a focus on dependent/neglected and abused children. It emphasizes the police, court, correctional, and child protective agencies that process young offenders. Prerequisites: Writing Skills II (ENG095), Academic Reading III (ESL098) or Reading Skills II (RDG095) or placement.	**3**
CRJ-103	**Criminal Law**	This course examines the substantive law of crimes including the general and social parts of criminal law; classification of crimes against persons, property, and the public welfare; nature of crime; criminal liability; elements of crimes; and jurisdiction. Through case studies, the course emphasizes matters affecting law enforcement. Prerequisites: Writing Skills II (ENG095), Academic Reading III (ESL098) or Reading Skills II (RDG095), or placement.	**3**
CRJ-104	**American Legal System**	This introductory course covers American law. The course examines the origins of the American legal system through an analysis of its function, its sources and its varied aspects. It explores the uniqueness of the American legal system through a thorough analysis of due process. The course covers the myths versus the realities of law.	**3**
CRJ-106	**Principles of Security Management**	This survey course covers the organization and administration of security and loss prevention programs in industry, business, and government. The course emphasizes the protection of assets, personnel and facilities, and the concept of risk management. It focuses on physical security methods, the development and implementation of security policies and procedures, and the use of security officers. Prerequisites: Writing Skills II (ENG095), Academic Reading III (ESL098) or Reading Skills II (RDG095) or placement.	**3**

CRJ-107	**Introduction to Corrections**	This survey course covers the correctional process from arrest to probation or parole. The course provides students with an understanding of corrections as an essential component in the criminal justice system and gives an orientation to current correctional concepts and various correctional institutions. Prerequisites: Writing Skills II (ENG095), Academic Reading III (ESL098) or Reading Skills II (RDG095), or placement.	**3**
CRJ-115	**Terrorism**	This course examines terrorism from both a philosophical and historic perspective. It covers right and left wing organizations, international and domestic groups as well as the ways terrorism relates to the business community. Prerequisites: Writing Skills II (ENG095) or placement and Academic Reading III (ESL098) or Reading Skills II (RDG095) or placement.	**3**
CRJ-117	**Street Law**	This is an introductory course in American law. The course will examine the origins of the American Legal System through an analysis of its function, sources and its varied aspects. This course introduces students to fundamental criminal law and constitutional law principles and provides a platform for guided discussions of important public policy issues concerning, crime, discrimination, healthcare, and immigration. The course uses the latest instructional technology including e-portfolios, case studies, simulated legal exercises, small group exercises and analytical thought problems to develop higher level thinking skills that prepare students for other course work in criminal justice, law, sociology, and history and government.	**3**
CRJ-201	**Management in Criminal Justice**	This course presents the principles of administration and management of criminal justice agencies. It examines organizational structure, responsibilities, and the interrelationships of administrative, line, and staff services in police, security, court, and correctional facilities. Prerequisites: A grade of C or better in College Writing I (ENG111), Introduction to Criminal Justice (CRJ101), Criminal Law (CRJ103), Criminal Investigation I (CRJ208) or instructor approval.	**3**

CRJ-212	**Community Corrections**	This survey course covers the history, development, trends, and role of the community-based correction program in the American criminal justice system. The course includes therapeutic, support, and supervision programs for offenders. It examines pretrial release, detainment, and community services, as well as innovative programs. Students must make site visits. Prerequisites: Grade of C or better in College Writing I (ENG111) and Introduction to Criminal Justice (CRJ101) and Criminal Law (CRJ103) or instructor approval.	**3**
CRJ-215	**Terrorism**	This course examines terrorism from both a philosophical and historic perspective. It covers right and left wing organizations, international and domestic groups as well as the ways terrorism relates to the business community. Prerequisites: Writing Skills II (ENG095) or placement and Academic Reading III (ESL098) or Reading Skills II (RDG095) or placement.	**3**
CRJ-216	**Street Drugs and Pharmaceuticals**	This survey course covers the manner in which the criminal justice system deals with drug use and abuse in our society. Topics include the psychosocial aspects of drugs, the pharmacology of drugs, street names, cost, and current rehabilitation practices. The course analyzes prevention programs in light of what works and what doesn't as well as the cost of drugs to society. Prerequisites: Introduction to Criminal Justice (CRJ101) and Criminal Law (CRJ103) or instructor approval.	**3**

CRJ-299	**Criminal Justice Internship**	Students work 150 hours in a criminal justice facility, probation department, juvenile detention center, or house of corrections, as assigned by the contract advisor. Students work under an assigned criminal justice professional, participate actively in the preparation of pre-sentence reports, and conduct intake and post conviction interviews. Students learn how to perform record checks and prepare probation recommendations, etc. Students work on inmate classification, work release programs, and in educational settings. Students may assist counselors and other staff, depending upon the type of facility to which the student is assigned. Through active participation in online functions of the criminal justice agency, students gain knowledge and understanding. The contract advisor and the assigned criminal justice official evaluate students' work. Students meet bi-weekly with their advisors to prepare papers and work on related projects. Students are responsible for following all guidelines in the BHCC Internship Handbook. Prerequisite: Permission of the instructor.	**3**
CUL-299	**Culinary Arts Internship**	The internship allows students the opportunity to gain practical experience in the field of culinary arts. The internship begins after completion of the first academic year and consists of 150 hours of work experience in an approved foodservice facility.	**3**
CUL-299P	**Culinary Arts Internship**	The internship allows students the opportunity to gain practical experience in the field of baking and pastry arts. The internship begins after completion of the first academic year and consists of 150 hours of work experience in a bakery or pastry shop approved by your instructor. Prerequisite: Chair Approval.	**3**
ECE-101	**Guidance and Discipline**	This course covers the study of effective communication in guiding behavior. The course emphasizes techniques that help children build positive self-concepts and individual strengths within the context of appropriate limits and discipline. Prerequisite: Child Growth/Development (ECE103).	**3**

ECE-103	**Child Growth and Development**	This course covers the normal development of children through the age of twelve with emphasis on the physical, cognitive, social, and emotional components of development of the infant, toddler, preschool and school age child. The course meets Department of Early Education and Care guidelines for child growth and development. Prerequisites: Grade of C or better in Academic Reading III (ESL098) and Academic Writing III (ESL099) or Reading Skills II (RDG095) and Writing Skills I (ENG090) or exemption from reading and writing requirements by placement testing.	**3**
ECE-104	**Curriculum in Early Childhood Education**	This course is the study of early childhood education programs with emphasis on curriculum development in areas such as art, music, science, literature, math, language arts, and dramatic play. Prerequisite: Child Growth/Development (ECE103).	**3**
ECE-207	**Literacy Development and Learning for Children**	(Formerly ECE107) This course is a study of concept development and learning in early childhood education programs with emphasis on curriculum development in the area of literacy development for young children. Prerequisites: Child Growth/Development (ECE103) (or its equivalent) and Curriculum in Early Childhood Education (ECE104) or Child Growth/Development (ECE103) and Introduction and Foundations of Education (EDU101).	**3**
ECE-211	**Young Children With Special Needs**	(Formerly ECE111) This course covers the study of children with physical, social, emotional and/or cognitive disabilities with emphasis on techniques for mainstreaming and inclusion of these children into existing early childhood programs. Prerequisites: Child Growth/Development (ECE103) plus three (3) ECE or EDU courses.	**3**
ECE-212	**Families/Community in Early Childhood Ed**	(Formerly ECE212) This course is the study of the relationship of parents and communities to early childhood programs. The course emphasizes parental needs for early care and education, parenting skills and need for communication with parents, challenges of dealing with diverse populations and multiple family structures using an anti-bias approach which respects diversity and encourages collaborative efforts in caring for children. Prerequisites: Child Growth/Development (ECE103) plus three (3) ECE or EDU courses.	**3**

ECO-201	**Macroeconomics**	This course covers an introduction to the American economy. Topics include: scarcity, opportunity cost and the production possibility curve, unemployment, inflation, GDP and related aggregates, economic growth, classical Keynesian models of income and employment determination, government policies for full employment and price stability, and money and the banking system. The course meets General Education "World View" Requirement Area 3. Prerequisites: Foundations of Algebra (MAT097) and Reading Skills II (RDG095) or placement.	**3**
ECO-202	**Microeconomics**	This course covers an introduction to the market system. It covers basic demand and supply analysis, theory of consumer choice, demand and supply elasticity, long run and short run cost curves, and price and output determination under different market structures, such as perfect competition, monopoly and monopolistic competition. The course applies microeconomic principles for analyzing government regulations. The course meets General Education "World View" Requirement Area 3. Prerequisites: Foundations of Algebra (MAT097) and Reading Skills II (RDG095) or placement.	**3**
EMT-103	**Emergency Medical Technician**	This course covers the rendering of emergency care to the sick and injured promptly and efficiently. It conforms to the EMT-B national standard curriculum, as adopted by the Commonwealth of Massachusetts, and is a prerequisite for taking the state EMT Exam. Students are responsible for taking the certification examination for EMT. Additional expenses may include supplies, equipment, and/or uniforms.	**7**

ENG-090	**Writing Skills I**	The first part of a two-semester basic writing sequence, this course develops writing skills needed to begin work in the College Writing program. The course places primary emphasis on the development of good sentence writing skills through frequent practice. Such practice may take the form of writing journals, paragraphs, and short essays. Faculty provide attention to difficulties with grammar, punctuation, and spelling primarily on an individual basis. The course does not satisfy any part of the College Writing requirement for graduation. Placement is determined by assessment testing or faculty referral. Upon completion of Writing Skills I (ENG090) with a grade of C or better, students enroll in Writing Skills II (ENG095).	**3** **3**
ENG-095	**Writing Skills II**	This course develops language skills needed to communicate effectively in college study, in the professions, and in the business world. The course includes sentence formation, applied grammar, spelling, mechanics, and paragraph development. Note: Students must pass the Basic Writing Competency Exam in order to receive a passing grade for this course. The course does not satisfy the college writing requirement for graduation. Prerequisite: Grade of C or better in Writing Skills I (ENG090) or placement.	
ENG-111	**College Writing I**	This course emphasizes writing as a process, from planning and drafting through revising and editing. Using personal experience, readings, and other sources, students write unified, coherent, well-developed essays and practice paraphrasing, summarizing, and using sources responsibly. To be eligible to take College Writing II (ENG112), students must pass the College Writing Exam and earn a grade ofC or better for this course. The course meets General Education "College Writing" Requirement Area 1. Prerequisite: Grade of C or better in Writing Skills II (ENG095) and Academic ReadingIII (ESL098) or Reading Skills II (RDG095) or placement.	**3**
ENG-112	**College Writing II**	This course focuses on the research paper, the longer essay, argumentation, critical writing, and reading. The course meets General Education College Writing Requirement Area 1. Prerequisite: Grade of C or better in College Writing I (ENG111).	**3**

ENG-171	**Oral Communication**	This course develops students' pose and self-confidence through oral expression. The course emphasizes presentation of individual talks and participation in class discussions.	**3**
ENG-203	**Creative Writing Workshop**	This course introduces students to the writing of poetry, short stories, plays, and autobiographies. The course includes some model readings, but the main work is student writings in all four genres. Prerequisite: Writing Skills II (ENG095) or placement in College Writing I (ENG111).	**3**
ENR-101	**Introduction to Engineering/Lab**	This course provides an overview of the engineering profession. Topics to be discussed include fields of study within engineering; the engineering profession, including engineering ethics; and engineering design and problem-solving. Emphasis is on team-building and teamwork approach to engineering projects. Course meets 3 hrs. lecture - 3 hrs. lab. Pre/co-requisite: Grade of C or better in College Algebra for STEM (MAT194).	**4**
ENV-105	**Environmental Science I/Lab**	This course covers an introduction to the physical and biological structure of the natural environment within a global perspective. The course emphasizes both a local and global perspective on the study of natural systems and the impacts of human society on these systems. Topics include: ecosystem dynamics, international conservation biology, biodiversity, evolution and adaptation, population dynamics, climate, and the role of science and technology in business and society, and sustaining ecosystems and wildlife. Laboratory investigations develop critical thinking and formal report writing skills. The department recommends this course for A.S. degree students as the General Education "Science and Technology" Requirement Area 5. Course meets 3 hrs. lecture; 1.5 hrs. lab. Prerequisites: Writing Skills II (ENG095), a grade of C or better in Foundations of Mathematics (MAT093), and Reading Skills II (RDG095) or placement.	**4**

ENV-106	**Environmental Science II/Lab**	This course examines the global and local impact of human culture upon the natural systems. Students investigate both destructive and constructive elements of human action within the natural environment. Also, students learn the role of science and technology in the environment and society. Topics include: air and water pollution; toxicity; ozone depletion; global warming; hazardous waste; the role of science and technology in business and society; and renewable and nonrenewable energy resources. Laboratory investigations develop students' critical thinking skills and formal report writing skills. Course meets 3 hrs. lecture; 1.5 hrs. lab. Prerequisites: Writing Skills II (ENG095), a grade of C or better in Fundamentals of Math (MAT091) or placement and Academic Reading III (ESL098) or Reading Skills II (RDG095), or placement.	**4**
ENV-111	**Survey of Renewable Energy**	This course investigates the potential of renewable energy technologies to help solve environmental and economic problems within society. Areas of investigation include solar energy, wind power, hydropower, geothermal, fuel cells, biomass, ocean wave power, and alternative transportation options. Also addressed are conventional energy sources including oil, coal, natural gas and nuclear energy. Consideration will be given to related issues such as costs, externalities, system efficiencies, emissions and other environmental impacts, financing incentives, and the regulatory and market forces impacting the alternative energy industry. Students will learn how to assess the viability of incorporating renewable technology, such as solar or wind power, for residential and commercial applications. Course meets 3 hours lecture; 1.5 hours lab. This course meets General Education "Science and Technology" Area 5 requirement. Prerequisites: Foundations of Mathematics (MAT093),Writing Skills II (ENG095), Reading Skills II (RDG095) or placement equivalency.	**4**

EPU-251	**Electric Power/Utility Tech Internship**	This course will cover a variety of topics that consist of practical work experience in the NSTAR workforce environment involving working on line trucks and learning and performing all of the tasks of an overhead line worker. The course will also cover the instruction and practical exercise of soft skills in todays work environment. Soft skills are those skills used every day in the workplace to assist in making assigned tasks easier to accomplish through teamwork and collaboration in a multi-cultural environment. Soft skills are increasingly being incorporated in job descriptions throughout the workforce as companies and institutions seek to employ students that have had successfully incorporated soft skills as part of their curriculum. Prerequisites: College Writing I (ENG111), Fundamentals of Single Phase and Polyphase Metering (EPU151), Underground & Substation Operations (EPU153), and Group Dynamics (PSY107).	**3**
ESL-074	**Listening Comprehension & Discussions**	In this low-intermediate course students develop academic listening skills and participate in small group and whole class discussions based on articles, lectures, and multi-media sources. Students will learn grammar and vocabulary in the context of the materials used for listening, speaking, reading, and writing activities. Students must earn a C or better in order to pass the course. Prerequisite: Placement into ESL level I.	**3**
ESL-075	**Grammar Structures & Editing**	This low-intermediate course focuses on improving grammar and editing skills through weekly grammar lessons, writing assignments, class discussions and assessments. Students will develop their ability to compose grammatically correct and comprehensible sentences and short writings. Students receive individual feedback that targets their needs. Students must earn a C or better in order to pass the course. Prerequisite: Placement into ESL Level I.	**3**

ESL-078	**Academic Reading I**	In this low-intermediate course, students learn pre-reading skills, organizational styles, academic vocabulary, dictionary use, referents, critical reading, basic verb tenses and parts of speech, and how to summarize, paraphrase, and identify main ideas and supporting details. Students will learn to complete homework assignments in basic MLA format. Students must earn a C or better in order to pass the course. Prerequisite: Placement into ESL Level I.	**3**
ESL-079	**Academic Writing I**	In this low-intermediate course, students learn to write paragraphs and short essays through an academic writing process in a variety of rhetorical styles using basic MLA format. Student will write from personal experience and respond to reading by paraphrasing and quoting. Students will learn to write different sentence types, using coordinators and subordinators. Punctuation and grammar will be taught, and students will apply their knowledge by revising and editing their papers. Students must pass the ESL079 Writing Competency Exam and earn a C or better in order to pass the course. Prerequisite: Placement into ESL Level I.	**3**
ESL-083	**Pronunciation for Academic and Professional Success**	This course for non-native speakers of English focuses on the pronunciation, rhythm and intonation of the English language to enable clearer, more effective, and native-like pronunciation in English. The course is designed for students who have a least intermediate fluency in English, but who require considerable accent reduction for academic and professional purposes. Students may be required to complete assignments in the Language Lab. Prerequisites: placement in Academic ESL Level I or higher.	**3**
ESL-086	**Academic Listening & Note-Taking**	This high-intermediate course focuses on listening and note-taking skills. Students develop a system for note-taking and learn how to use their notes to answer comprehension questions as well as to complete writing assignments. All listening and note-taking activities include reading and writing exercises. Students learn grammar in the context of the materials used for listening activities and student generated writing. Students must earn a C or better in order to pass the course. Prerequisites: Grade of C or better in ESL074, ESL075, ESL078, and ESL079, or placement.	**3**

ESL-087	**Contemporary Issues & Conversations**	In this high-intermediate course, students practice and demonstrate effective speaking functions in small-group and whole-class discussions of academic reading materials. Students develop a method for delivering an oral presentation to a large group. All speaking activities are organized around reading and writing exercises. Students learn grammar and build their level-appropriate academic vocabulary in the context of speaking, in the context of the reading materials, and in the context of student generated writing. Students must earn a C or better in order to pass the course. Prerequisites: Grade of C or better in ESL074, ESL075, ESL078, and ESL079, or placement.	**3**
ESL-088	**Academic Reading II**	In this high-intermediate course, students increase their level-appropriate vocabulary and develop their reading skills and strategies as they analyze, discuss, and write about longer readings. Students are also introduced to critical thinking skills such as drawing inferences, understanding idioms and figures of speech, and recognizing purpose and perspective. Students learn grammar in the context of the reading materials and in student generated writing. Students must earn a C or better in order to pass the course. Prerequisites: Grade of C or better in ESL074, ESL075, ESL078, and ESL079, or placement.	**3**
ESL-089	**Academic Writing II**	In this high intermediate course, students develop their writing skills with a focus on the process of college writing from planning and drafting to revising and editing. Students demonstrate their critical thinking skills by writing paragraphs and essays from their personal experience and from readings of moderate complexity. Students practice correct grammar and mechanics in the context of the readings and their own writing. Students must pass the ESL089 Writing Competency Exam and earn a grade of C or better in order to pass the course. Students must earn a C or better in order to pass the course. Prerequisites: Grade of C or better in ESL074, ESL075, ESL078, and ESL079, or placement.	**3**

ESL-096	**Lecture Comprehension & Academic Vocabulary**	In this advanced course, students develop an academic note-taking system as they listen to lectures and authentic sources. Students practice using their notes to answer comprehension questions, write summaries of sources, and compose responses to critical thinking questions. Students learn advanced academic vocabulary and grammar in the context of advanced level readings, websites, and lectures. Students must earn a C or better in order to pass the course. Prerequisites: Grade of C or better in ESL086, ESL087, ESL088, and ESL089 or placement.	**3**
ESL-097	**Academic Discussions & Presentations**	This advanced course focuses on the communication skills necessary in an academic setting. Students develop and improve a method for delivering an oral presentation to a large group using effective delivery, visual aids, secondary sources, and level-appropriate academic vocabulary. Students practice comprehensible pronunciation along with stress and intonation patterns. All speaking activities are organized around academic reading materials which students will write about and discuss in small groups. Students must earn a C or better in order to pass the course. Prerequisites: Grade of C or better in ESL086, ESL087, ESL088, and ESL089 or placement.	**3**
ESL-098	**Academic Reading III**	This advanced course focuses on the critical and analytical reading skills necessary for success with college level materials. Students demonstrate comprehension of level-appropriate readings through class discussions, writing assignments, and other assessments. Students also develop critical (higher order) thinking skills by interacting with the readings and by summarizing, paraphrasing, quoting, responding to, and evaluating readings. Students do extensive work on understanding and analyzing main ideas and supporting details of articles and essays. Students learn grammar and academic vocabulary in the context of the reading materials. Students must earn a C or better in order to pass the course. Prerequisites: Grade of C or better in ESL086, ESL087, ESL088, and ESL089, or placement.	**3**

ESL-099	**Academic Writing III**	This advanced course focuses on the academic writing skills necessary for success in college content courses. Students develop their abilities with sentence structure, paragraph writing, and essay writing through extensive practice with multiple drafting, revising, editing, and proofreading. Students write from personal experience, answer essay questions from readings of substantial complexity, and write essays using research sources. Students learn grammar in the context of the readings and student generated writing. Students must pass the ESL099 Writing Competency Exam and earn a C or better in order to pass the course. Prerequisites: Grade of C or better in ESL086, ESL087, ESL088, and ESL089 or placement.	**3**
FLM-101	**Film As Art**	This course covers film techniques, terminology, and criticism, using a variety of recent popular films on television and videotape as the subjects for discussion and analysis. This course meets General Education "Humanities" Requirement Area 6. Pre/co-requisite: College Writing I (ENG111).	**3**
FLM-102	**American Cinema**	This course brings Hollywood film making into clear focus as an art form, as an economic force, and as a system of representation and communication. The course probes the deeper meaning of American movies through encounters with the works of famous directors such as John Ford, Howard Hawks, and Martin Scorsese. This course meets General Education Requirement Humanities Area 6. Pre/corequisite: College Writing I (ENG111).	**3**
FPS-107	**Fire Company Officership**	This course examines the scope and functions of the fire company officer. Topics include the role of the fire service, departmental organization, administrative and management procedures, training, public relations, tactics and strategy, and fire prevention.	**3**
FPS-119	**Principles of Fire and Emergency Services Safety and Survival**	This course introduces the basic principles and history related to the national firefighter life safety initiatives, focusing on the need for cultural and behavior change throughout the emergency services. Prerequisites: A grade of C or better in Writing Skills II (ENG095) and Academic Reading III (ESL098) or Reading Skills II (RDG095) or exemption by placement testing.	**3**

FPS-221	**Strategy and Tactics**	This course provides the principles of fire ground control through utilization of personnel, equipment and extinguishing agents. Prerequisites: Principles of Emergency Services (FPS123) and a grade of C or better in Writing Skills II (ENG095) and Academic Reading III (ESL098) or Reading Skills II (RDG095) or exemption by placement testing.	**3**
FRE-101	**Elementary French I**	This course introduces students to the sounds and structures of French with emphasis on the acquisition of a limited but useful vocabulary and is offered for students with little or no previous knowledge of French. The course is not intended for native speakers or for students who have studied this language within the last three years.	**3**
FRE-102	**Elementary French II**	This course covers a continuation of Elementary French I (FRE101) and places emphasis on speaking and reading skills. The course meets General Education "Humanities" Requirement Area 6. Prerequisite: Elementary French I (FRE101) or one year of high school French.	**3**
GEO-101	**World Regional Geography**	This course examines the geographical context of major social, cultural, economic, and political issues in selected regions of the world and develops a mastery of maps and other graphic aids as means of learning and communication. Major regional emphases vary from semester to semester among areas of Eastern Europe, the former USSR, the Middle East, the Orient, Latin America, and Africa. The course meets "World View" General Education Requirement Area 3. Prerequisites: Grade of C or better in Academic Reading III (ESL098) or Reading Skills II (RDG095); and Writing Skills II (ENG095); or exemption by placement testing.	**3**

GOV-101	**Government/Politics in US**	The course explores some questions and theories that interest political scientists and historians, and methods they use to explain governmental operations. Insight into the nature of political ideals, as embodied in the Constitution, is developed. Topics include federalism, organization and functions of the three branches of the national government, civil liberties and civil rights, public opinion and voting behavior, the media, bureaucracies, and public policy. This course meets General Education "Individual and Society" Requirement Area 2. Prerequisites: Grade of C or better in Academic Reading III (ESL098) or Reading Skills II (RDG095); and Writing Skills II (ENG095); or exemption by placement testing.	**3**
GOV-103	**State/Local Politics**	This course acquaints students with the history and functions of state and local governance. It includes an analysis of political organization and structure; state and local government taxing powers; economic, educational, and police powers; and public service functions of government. The course meets General Education "Individual and Society" Requirement Area 2. Prerequisites: Grade of C or better in Academic Reading III (ESL098) or Reading Skills II (RDG095) and Writing Skills II (ENG095); or exemption by placement testing.	**3**
HIS-101	**Western Civilization to the Renaissance**	This course covers a multi-disciplinary survey of the evolution of Western civilization from its roots in ancient world through the medieval and early modern periods. It examines artistic, ideological, economic, social, and political questions in order to assist students to understand the development of modern Western culture. This course meets the General Education World View Area 3 requirement. Prerequisites: Grade of C or better in Academic Reading III (ESL098) and Academic Writing III (ESL099) or Reading Skills II (RDG095) and Writing Skills II (ENG095); or exemption by placement testing.	**3**

HIS-102	**Western Civilization from the Renaissance**	This course covers a survey of the major intellectual, social, economic, and political developments in Western civilization since the 17th century. It emphasizes the roots of contemporary institutional and ideological problems. The course meets General Education World View Requirement Area 3. Prerequisites: Grade of C or better in Academic Reading III (ESL098) and Academic Writing III (ESL099) or Reading Skills II (RDG095) and Writing Skills II (ENG095); or exemption by placement testing.	**3**
HIS-111	**World Civilization to 1500**	This course examines similarities and differences among the major world civilizations before the modern era. Topics include traditions of governance, art, religion and philosophy, technology, family structure, and everyday life. The course meets General Education "World View" Requirement Area 3. Prerequisites: Grade of C or better in Academic Reading III (ESL098) or Reading Skills II (RDG095)and Writing Skills II (ENG095), or exemption by placement testing.	**3**
HIS-112	**World Civilization From 1500**	This course examines similarities and differences among the major world civilizations in the modern era. Topics include traditions of governance, art, religion and philosophy, technology, family structure and everyday life. The course meets General Education "World View" Requirement Area 3. Prerequisites: Grade of C or better in Academic Reading III (ESL098) and Academic Writing III (ESL099) or Reading Skills II (RDG095) and Writing Skills II (ENG095), or exemption by placement testing.	**3**
HIS-151	**US History: Colonization through the Civil War**	This course traces the growth and development of America from colonial beginnings to the Civil War. The course devotes major attention to the people, critical issues, and significant forces that determined the course of events that shaped our civilization. The course meets General Education "World View" Requirement Area 3. Prerequisites: Grade of C or better in Academic Reading III (ESL098) or Reading Skills II (RDG095), and Writing Skills II (ENG095) or exemption by placement testing.	**3**

HIS-152	**US History: Reconstruction to the Present**	This course covers the rise of the United States from the turmoil of the Civil War to superpower status. The course examines the cultural, economic, diplomatic, and political forces that have given the nation its shape. The course meets General Education "World View" Requirement Area 3. Prerequisites: Grade of C or better in Academic Reading III (ESL098) or Reading Skills II (RDG095) and Writing Skills II (ENG095); or exemption by placement testing.	**3**
HRT-133	**Culinary Theory in Hospitality**	Students gain knowledge in the use of tools and equipment while learning basic procedures related to preparation and cooking. Students learn basic menu construction and presentation used in the development of full menus utilized in a quantity food production facility. The course emphasizes cooking techniques, terminology, equipment use, and commercial kitchen operation, as well as proficiencies in knife skills and uses of various culinary tools. Additional expenses may include supplies, equipment, and/or uniforms.	**3**
HRT-210	**Hotel/Rest/Tour Field Exp Internship**	This course integrates classroom study with practical work experience. Under the guidance of a site supervisor and a faculty member, the experience helps students to shape career goals and to gain valuable work experience. Prerequisite: Principles of Management and Service in Hospitality (HRT121).	**3**
HSV-112	**Addiction**	This course investigates the biological, psychological, and emotional forces involved in the addiction process. The course covers the major classes of psychoactive drugs by examining drug action, uses, and limitation. Social problems and the role of human services in prevention and intervention play an integral role in the course. Prerequisite: Principles of Psychology (PSY101).	**3**
HSV-215	**Introduction to Substance Abuse Counseling**	(Formerly HSV115) This course provides an introduction to human services and addictions, including the types of clients served, the duties of human service personnel, philosophy and dynamics of addictions treatment and an overview of state and community resources. Case studies are used to examine the development, identification, dynamics and recovery of addicts. Prerequisites: Addiction (HSV112) and Counseling (PSY215).	**3**

INT-110	**American Culture**	This interdisciplinary course focuses on the historical evolution of American beliefs and values and is designed for students from other cultures. Students study the way these values have shaped U.S. contemporary institutions such as education, business, the government, and the family. The course examines extensive cross-cultural comparisons with the students' native cultures. Materials include film, music, and short works of literature. The course meets General Education "Humanities" Requirement Area 6. Prerequisite: Academic Reading III (ESL098) or Reading Skills II (RDG095) or exemption from reading requirement by placement testing.	**3**
JPN-101	**Elementary Japanese**	This course is an introduction to the sounds and structures of the Japanese language with emphasis on the acquisition of a limited but useful vocabulary. The course is designed for students who want to learn essential Japanese as quickly and as effectively as possible. Students read and write with Hiragana and look into the world of Kanji. This course is not intended for native speakers or students who have studies this language within the last three years.	**3**
JPN-102	**Elementary Japanese II**	This course covers a continuation of the study of basic structures of the Japanese language. The course stresses additional useful vocabulary through reading, writing, and conversation. The course covers material that allows students to learn essential Japanese as quickly and effectively as possible. The course emphasizes encouraging and helping students obtain the ability to use the Japanese language in practical situations. It emphasizes student ease in interacting and communicating in an uncomplicated but adult language. Students read Kana and some basic Kanji. The course meets General Education Humanities Requirement Area 6. Prerequisite: Elementary Japanese I (JPN101).	**3**

LCS-101	**Learning Community Seminar for First Year Students**	The Learning Community Seminar enables first-year students to make a successful transition to college. The seminar develops students? abilities to reflect and assess; discover their strengths; explore career interests; set goals and problem solve; connect with peers, faculty and staff; develop critical thinking, information literacy and communication skills; collaborate in active, diverse learning environments; and make connections between classroom learning and the larger community. Each Learning Community Seminar explores a different topic. Students may choose a Seminar based on their program of study or general interests.	**3**
LIT-201	**Introduction to Literature**	This course develops students' ability to interpret, analyze, evaluate, and respond to ideas about literature. Students explore the nature, structure, and form of poetry, short story, and drama. The course meets General Education Humanities Requirement Area 6. Pre/corequisite: College Writing I (ENG111).	**3**
LIT-203	**Literature in America I**	This course traces the physical, moral, and psychological development of an emerging nation through its literature. The course examines themes of sin, guilt, justice, and equality in the historical movement of the nation from colonial settlement to westward expansion. The course includes works representative of the ethnic and racial diversity of American culture. The course meets General Education "Humanities" Requirement Area 6. Pre/corequisite: College Writing I (ENG111).	**3**
LIT-204	**Literature in America II**	This course analyzes the crises of the nation from the Civil War through the twentieth century, as shown through its literature. The course examines the themes of progress, materialism, alienation, and corruption against the yardstick of opportunity, heroism, and individualism, which represent the traditional American dream. The course includes works representative of the ethnic and racial diversity of American culture. The course meets General Education "Humanities" Requirement Area 6. Pre/corequisite: College Writing I (ENG111).	**3**

LIT-207	**Literature and Society I**	This course explores the role of literature as a mirror of the values and conflicts of a changing society. It also examines stereotypes associated with minorities and illustrates the role of literature in alerting society to social and moral injustice. The course meets General Education Humanities Requirement Area 6. Pre/corequisite: College Writing I (ENG111).	**3**
LIT-211	**Masterpieces of World Literature I**	This course considers the landmarks of literature, from ancient times to the eighteenth century, which have shaped, reflected or criticized Western thought. The faculty select readings from Homer, Greek Drama, the Bible, Dante, Medieval Romance, and Shakespeare. Faculty may couple these readings with their contemporary versions or transformations by such twentieth century writers as Sartre, O'Neill, MacLeish, Stoppard, and Joyce. The list may vary. The course meets General Education "Humanities" Requirement Area 6. Pre/corequisite: College Writing I (ENG111).	**3**
LIT-212	**Masterpieces of World Literature II**	This course continues the examination of the great works of the humanist tradition. Faculty select readings from the eighteenth century to the twentieth century from Moliere, Swift, Voltaire, Chekhov, Ibsen, Tolstoy, Conrad, Turgenev, Zola, Kafka, Singer, Bellow, Mishima, Orwell, and Eliot. The list may vary. The course also includes an international studies module of the contemporary literature of Africa, Asia, and Latin America. The course meets General Education "Humanities" Requirement Area 6. Pre/corequisite: College Writing I (ENG111).	**3**
LIT-217	**Children's Literature I**	This course introduces students to children's literature in all its forms, from fables to fairy tales, from realistic fiction to fantasy, from nonsense to narrative poetry. The course covers works both classic and contemporary. The course meets General Education "Humanities" Requirement Area 6. Pre/corequisite: College Writing I (ENG111).	**3**

LIT-219	**African Literature**	This survey course of contemporary African literature exposes students to the diversity of the themes, styles and modes of expression peculiar to the enormous continent of Africa. Students study the oral tradition as it is reflected in folktales, stories, and poems. In addition to reading essays and articles about social and historical conditions that affect the literature of the continent, students read numerous short stories and at least three novels, each reflecting the culture of a different region of the continent. The course meets General Education "Humanities" Requirement Area 6. Pre/co-requisite: College Writing I (ENG111).	**3**
MAN-105	**Principles of Marketing**	This course is a study of the basic principles of marketing and the application of these principles in today's changing competitive environment. The focus of this course is on the behavior of the consumer market and the product, pricing, promotion and distribution decisions employed to create consumer satisfaction. Prerequisites: Academic Reading III (ESL098) or Reading Skills II (RDG095) or placement and Writing Skills I (ENG090) or placement.	**3**
MAN-107	**Introduction to Entrepreneurship**	This is an introductory course for those interested in starting or running their own business. Students will assess how technology and innovation, demographics, economics and social changes create business opportunities. Students will evaluate the feasibility of business ideas based on strengths, weaknesses, financial goals and competitive threats. Students will also identify desirable characteristics of leading entrepreneurs to identify skills and behaviors which lead to success. Prerequisites: Writing Skills II (ENG095), Academic Reading III (ESL098) or Reading Skills II (RDG095) or placements.	**3**

MAN-111	**Principles of Management**	The skills and functions, theories and principles of management are studied in respect to the socio-cultural environment within which a firm operates. An emphasis on decision-making, organizational strategy, planning and system design provides a framework for examining the application of management concepts in the modern business world and the evaluation of organization problems and issues. Prerequisites: Introduction to Business (BUS101) for Business Concentration, Management and Finance options only. A grade of C or better in Academic Reading III (ESL098) and Academic Writing III (ESL099) or Reading Skills II (RDG095) and Writing Skills I (ENG090) or exemption from reading or writing requirements by placement testing.	**3**
MAN-112	**Organizational Behavior/Design**	Organizational behavior and design, social systems and contemporary management issues are explored, experienced with an emphasis on interrelationship of culture, organizational structure and policies upon individual, group and organizational performance. Topic coverage includes: leadership styles; learning; motivation; group structure; decision-making; group dynamics and problem solving. Concepts and issues of power, conflict, change and organizational processes that impact interpersonal or social settings, group interactions or the workplace environment are examined. This course meets General Education Individual/Society Requirement Area 2 for A.A. and A.S. Business Administration students except for the A.S. International Business option.	**3**
MAT-093	**Foundations of Mathematics**	Topics include solving applied problems with whole numbers, decimals and fractions; ratios and proportions; rates; percentages and applications in sales tax, interest, commissions, and discounts; determining numerical averages and medians; exponents and square roots; measurement; and geometry. Technology is incorporated to facilitate problem solving. This course does not satisfy degree requirements. Course requires an additional lab hour. Upon completion of this course with a grade of C or better, students enroll in Foundations of Algebra (MAT097).	**3**

MAT-097	**Foundations of Algebra**	This course is a continuation of Foundations of Math (MAT093). Topics include algebraic expressions, solving and graphing linear equations and inequalities, exponents and scientific notation, introduction to polynomials, and systems of linear equations and their graphs. Technology is incorporated to facilitate problem solving. This course does not satisfy degree requirements. Prerequisite: Grade of C or better in Foundations of Mathematics (MAT093) or placement. Course many require an additional lab hour.	**3**
MAT-099	**Intermediate Algebra**	This course is a continuation of Foundations of Algebra (MAT097). Topics in this course include polynomial arithmetic, introduction to functions, factoring, roots and radicals, rational expressions, absolute value inequalities, quadratic equations and the quadratic formula, and solving applied problems. This course does not satisfy degree requirements. Prerequisite: Grade of C or better in Foundations of Algebra (MAT097) or placement. Course may require an additional lab hour.	**3**
MAT-100	**Topics in Career Math**	This course applies basic arithmetic techniques to the following business topics: percentage, trade and cash discounts, merchandising, depreciation, simple and compound interest and present value. The course covers additional topics that faculty choose from taxes, payroll, statistics, insurance, notes and drafts, installment buying, checking accounts, inventories, costing out, and the metric system. This course is appropriate only for Associate in Science students in Culinary Arts. Prerequisite: Grade of C or better in Foundations of Mathematics (MAT093) or placement.	**3**
MAT-133	**Introduction to Metric System**	This course enables students to recognize and use metric terms, roughly measure using body parts, and use estimation within the metric system.	**1**
MAT-171	**Finite Mathematics**	Set theory, coordinate systems and graphs, matrices and linear systems, linear programming, and probability are considered in this course. Applications to business and the social sciences are emphasized. This course meets General Education "Quantitative Thought" Requirement Area 4. Prerequisite: Grade of C or better in Foundations of Algebra (MAT097).	**3**

MAT-172	**Contemporary Math I**	This course covers varied mathematical topics that have applications in contemporary society. Topics include number theory (divisibility, Fermat's Theorem, characterization of primes, Diophantine equations), mathematical systems (base n and modular arithmetic, groups, rings, fields), logic(simple and compound statements, conditionals, symbolic logic, truth tables), and patterns and symmetries (Fibonacci sequence, Golden Ratio, natural and artistic illustrations, fractals). The course encourages students to interpret, analyze, and evaluate from a mathematical perspective. The course meets General Education "Quantitative Thought" Requirement Area 4. Prerequisite: Grade of C or better in Foundations of Algebra (MAT097) or placement.	**3**
MAT-173	**Contemporary Math II**	This course covers varied mathematical topics that have applications in contemporary society. Topics include statistics (sampling, measures of central tendency, measures of variation, normal distribution, frequency distributions and histograms), graph theory (modeling, Eulerian and Hamiltonian graphs, directed graphs, optimization procedures), calculators (specialized functions, number patterns, use in problem-solving), consumer math (payroll, investments, financing, budgets)and computers (algorithms, flowcharts, application to the course's other topics). The course encourages students to interpret, analyze, and evaluate from a mathematical perspective. The course meets General Education "Quantitative Thought" Requirement Area 4. Prerequisite: Grade of C or better in Foundations of Algebra (MAT097) or placement.	**3**
MAT-181	**Statistics I**	This course covers statistical concepts and methods. Topics include data organization, averages and variation; elementary probability; binomial, normal, and t-distributions; estimation and hypothesis testing; and linear correlation and regression. The course meets General Education Quantitative Thought Requirement Area 4. Prerequisite: Grade of C or better in Foundations of Algebra (MAT097) or placement.	**3**

MAT-194	**College Algebra for STEM**	This course is designed for science, technology, engineering, computer science, and mathematics students and provides a solid preparation for precalculus. The course covers systems of linear equations, matrices, partial fractions, linear programming, algebra of functions, quadratic equations, polynomials, rational and radical functions, complex numbers, exponential and logarithmic functions, maximum and minimum problems, symmetry, lines, conic sections, graphs of relations and functions, and applications. A graphing calculator is required for this course. This course meets General Education "Quantitative Thought" Requirement Area 4. Prerequisite: Grade C or better in Intermediate Algebra(MAT099)(a grade of B or better is recommended) or placement.	**4**
MAT-197	**Precalculus**	This course covers the following topics: functions and their graphs, polynomial functions, rational and radical functions, exponential and logarithmic functions, elements of trigonometry and trigonometric functions, analytic geometry, and sequence and series notation. Graphing calculator is required. Prerequisite: Grade of C or better in College Algebra-STEM (MAT194) or placement.	**4**
MAT-231	**Calculus for Management Science**	This one-semester course covers topics designed for students in business, economics, and the social sciences. Topics include limits, differentiation and integration of algebraic, exponential and logarithmic functions, optimization and other applications. Graphing calculator is required. Prerequisite: Grade of C or better in College Algebra for STEM (MAT194) or placement.	**4**
MAT-281	**Calculus I**	This course reviews concepts of functions, graphs and trigonometry to support the exploration of limits, derivatives, and basic integration. Topics will include limits, continuity, algebraic and trigonometric differentiation, applications of the derivative, the definite and indefinite integral, methods of integration, application of integration to determination of area, the Fundamental Theorem of Calculus and integration by substitution. Graphing calculator required. Prerequisite: Placement or grade of C or better in Precalculus (MAT197).	**4**

MAT-282	**Calculus II**	This course is a continuation of Calculus I (MAT281) and begins with a study of numerical integration. Techniques of integration are applied to the following topics: transcendental functions (including their derivatives), area of region between two curves, volume, integration by parts, trigonometric substitution, partial fractions, and improper integrals. Sequences and series are examined with an emphasis on determining convergence or divergence. Taylor and Maclaurin series will also be studied. Graphing Calculator is required. Prerequisite: Grade of C or better in Calculus I (MAT281) or placement.	**4**
MAT-285	**Ordinary Differential Equations**	This course will include first and higher order differential equations and applications, series solutions of differential equations, Laplace transforms, systems of linear first order differential equations and numerical solutions of ordinary differential equations. Emphasis will be placed on analytical techniques and engineering applications aided by the use of computer software. Material on linear systems will be incorporated. Prerequisite: Grade of C or better in Calculus II (MAT282).	**4**
MAT-291	**Linear Algebra**	This course will include linear systems of equations, matrix operations, determinants, linear dependency, vector spaces, linear transformations, eigenvalues and eigenvectors. Proofs by mathematical induction and contradiction will be incorporated. Emphasis will be placed on mathematical structure and axiomatic reasoning aided by the use of computer software. Pre/corequisite: Grade of C or better in Calculus I (MAT281).	**4**
MIG-111	**Imaging Technology I**	This course covers topics in physics of special significance in radiography. Specific areas include Newton's Laws, and the concepts of mass force, energy, work, and power. It includes heat and its production and transfer. It emphasizes the physics of wave motion. The course covers some general concepts of modern physics including Einstein's energy equation, the Heisenberg Principle and quantum concepts. A computer component introduces students to the principles and background of computers. Prerequisite: Fundamentals of Algebra (MAT094) or placement.	**3**

MIG-119	**Echo II**	This continuation course of the material presented in Echo I deals specifically with left ventricular function, cardiomyopathy, CAD, color Doppler, and imaging technique used to aid in the demonstration of these diseased states. This course also includes the technique of transesophageal, stress, and contrast echo technique. Prerequisite: Echo I (MIG112).	**3**
MIG-121	**Related Procedures in Pharmacology**	This course provides students with knowledge of diagnostic cardiac procedures, emphasizing indications, utility, and limitation of these procedures. The course also provides students with a basic knowledge and understanding of clinical pharmacology as it relates to cardiovascular disease and echocardiography. Prerequisite: Interpretation I (MIG115).	**2**
MIG-126	**Positioning II**	Using lecture and lab sessions, this course helps students achieve competency in the performance of radiographic examinations of the vertebral column and pelvic girdle. In addition, students study the principle of contrast agent administration in conjunction with radiographic examination of the urinary system, upper and lower gastrointestinal tract and gall bladder. Prerequisite: Positioning I (MIG122). Co-requisite: Full Time Medical Radiography Clinical II (MIG128F) or Part Time Medical Radiography Clinical II (MIG128P).	**3**
MIG-128P	**Part Time Medical Radiography Clin II**	This course covers a continuation of the clinical experience. Students assist in and observe an increasing number of different radiographic examinations as studied in Positioning I (MIG122). Additional expenses may include supplies, equipment and/or uniforms. Course meets two (2) evenings/week with 8 hours of clinical practice weekly. Prerequisite: Part-Time Medical Radiography Clinical I (MIG124P).	**1**

MIG-203	**Interpretation II**	This continuation course of Interpretation I covers an integrated approach to the echocardiography technique. Students review the Mayo Clinic tapes and discuss the development of skills necessary to exercise independent judgment and discretion in the performance of echocardiographic examinations. Students review and critique weekly case studies. The class uses group demonstrations to highlight the patient/sonographer/physician interactions. Students learn pathologic processes in order to build on their knowledge base in the interpretation of normal and abnormal echo features. Prerequisite: Interpretation I (MIG115).	**3**
MIG-205	**Vascular Ultrasound**	This course covers an introduction to the fundamentals of vascular ultrasound. It includes hemodynamic, Doppler spectral analysis, and duplex visualization of the cerebrovascular system. It also covers carotid, venous, and transcranial Doppler techniques. Prerequisite: Echo II (MIG119) for Cardiac Sonography Option. Co-requisite: General Sonography Clinical II (SON123) for General Sonography Option.	**3**
MIG-217	**Cardiac Sonography Clinical III**	This course covers a continuation of clinical practical experience in echocardiography. Under supervision of the clinical instructor and the BHCC clinical coordinator, students enhance their skills in performing echocardiograms. Faculty evaluate students' performances through clinical competencies in each related echo area. Students gain competency in the performance of echocardiograms. Students also obtain related experience in examinations such as stress echo and transesophageal. Additional expenses may include supplies, equipment, and/or uniforms. Course meets: five (5) days/week. Prerequisite: Cardiac Sonography Clinical II (MIG213).	**4**
MIG-222F	**Full-Time Medical Radiography Clin III**	This course allows students to expand upon skills developed during earlier clinical experience. Students assume more direct responsibility for specific radiographic examination. Additional expenses may include supplies, equipment, and/or uniforms. Course meets four (4) days/week with 32 hours of clinical practice weekly. Prerequisite: Full-time Medical Radiography Clinical II (MIG128F).	**3**

MIG-224	**Radiologic Technology II**	Using lecture and lab sessions, this course presents the x-ray circuit in form and function. Topics include, but are not limited to, characteristics of x-rays, wave-particle duality, x-ray production, target interactions, photon interactions with matter, digital and conventional fluoroscopy and electronic imaging units. Prerequisite: Imaging Technology I (MIG111).	**3**
MIG-227	**Pharmacology of Radiology**	This course is designed to provide basic concepts of pharmacology to the medical radiography student. Content includes chemical, generic and trade names for select drugs; pharmacokinetic and pharmacodynamics principles of select drugs; classification of drugs; action, effects, uses and side effects of select drugs on imaging procedures; categories of contrast agents; pharmacology of barium and iodine compounds; dose calculations for adult and pediatric patients; legal and ethical status of the radiographer's role in drug administration; and the radiographer's professional liability concerning drug administration. This course has a web-based component. Prerequisites: Patient Care for Medical Imaging (MIG109) and Anatomy and Physiology II/Lab (BIO204).	**1**
MIG-236P	**PT Medical Radiography Clinical V**	This final phase of medical radiography instruction allows students an opportunity to review and assess clinical skills acquired during their training. At the end of this rotation students are clinically proficient in general radiography. Additional expenses may include supplies, equipment, and/or uniforms. Course meets five (5) days/week with 40 clinical hours of practice weekly. Prerequisite: Part-Time Medical Radiography Clinical IV (MIG228P).	**5**
MUS-157	**Vocal Performance Workshop**	This is a workshop class that offers instruction in basic vocal skills. Instruction in these techniques will lead students to develop their ability to sing accurately and with confidence in any style. This class is open to anyone with a sincere interest in becoming a better singer, regardless of past vocal experience. Each class begins with a group warm-up session that leads to individual performances before the instructor and the rest of the class.	**3**
NHP-180	**Medical Terminology**	This course provides instruction in the development of basic medical terminology. Competency in medical terminology promotes effective communication among members of the healthcare team.	**3**

NUR-100	**Drug Calculation**	This course covers the apothecary, metric, and household systems of weights and measures and is designed for students admitted to the Nursing Program. The course focuses on the computation of drug dosages for oral and parenteral medications. It emphasizes the applications of skills necessary to compute dosages for infants, children, and adults and the calculations of intravenous infusions and medications. Class meets: 1 hr. lecture. Prerequisite: Foundations of Algebra (MAT097) or placement.	**1**
OIM-100	**PC Keyboarding Techniques**	This is an introductory course in college keyboarding designed for students with little or no keyboarding proficiency as well as those looking to upgrade or refresh their skills. Learning to type properly has never been more important. Using state-of-the-art, hands-on, self-paced software, students proceed from basic lessons through accuracy and speed-building exercises designed to prepare them for careers requiring keyboarding proficiency. Taught through BHCC's on-line eCollege, students submit hands-on progress reports to the course instructor as they proceed through each lesson. Upon completion of this course, students will gain the skill and knowledge necessary to type accurately based on one (1) minute timings at a minimum of 20 words per minute with one (1) error or less. For additional information and/or a course syllabus, contact CITDepartment@bhcc.mass.edu.	**1**

OIM-170	**Procedures for the Medical Office**	This course includes Windows, word processing, medical office procedures, and computerized medical management software. Students create documents commonly used in a medical office as well as job application materials, using templates, macros, and/or merged documents. Concepts covered include interpersonal communications, telecommunications, billing and collections, reimbursement procedures, records management, and mail classification and procedures. Hands-on experience using computerized medical management software provides practice in entering patient information, diagnostic cases, and financial transactions; processing insurance claims; scheduling patient appointments; and generating commonly used reports. Note: For Allied Health students or by permission of department chair. Prerequisite: Keyboarding: Document Generation I (OIM101) or Medical Computer Application (OIM102; formerly OIM142) or any computer applications course or by permission of the department chair.	**3**
PHL-101	**Introduction to Philosophy**	This introductory course acquaints students with the philosophic method, the problems and living issues of philosophy, and the great philosophers. Prerequisites: Grade of C or better in Academic Reading III (ESL098) or Reading Skills II (RDG095) and Writing Skills II (ENG095); or exemption by placement testing.	**3**
PHL-103	**Ethics**	This course covers the major philosophical issues in normative ethics and moral philosophy. It covers discussions regarding philosophical views about what is morally right or wrong and the applications to the individual and society. This course emphasizes contemporary problems, issues, and value conflicts. Grade of C or better in Academic Reading III (ESL098) and Academic Writing III (ESL099) or Reading Skills I (RDG090) and Writing Skills I (ENG090), or exemption by placement testing.	**3**

PHL-111	**World Religions**	This course analyzes the beliefs and practices of major world religions, including Hinduism, Buddhism, Judaism, Christianity, and Islam. Through study of these religions, students compare the beliefs of various traditions and understand their values in an historical context. The course meets General Education "World View" Requirement Area 3. Prerequisites: Grade of C or better in Academic Reading III (ESL098) or Reading Skills II (RDG095) and Writing Skills II (ENG095); or exemption by placement testing.	**3**
PHY-201	**General Physics I/Lab**	This introductory course covers the principles of physics, using a problem-solving approach. Laws of motion, forces, work and energy, momentum and harmonic motion will be covered. For the biology student this course will provide him or her with an enhanced understanding of the physical aspects of living systems. Laboratory work will reinforce the understanding of physical concepts and promote the development of problem solving skills. This course satisfies the physics requirement of the AS Biological Science program. This course does not satisfy the physics requirement of the AA Chemical Science or Physics/Engineering concentrations or the AS Engineering program. Prerequisite: Grade of C or better in Precalculus (MAT197).	**4**
PHY-202	**General Physics II/Lab**	This continuation course of General Physics I/Lab (PHY201) covers the following topics: waves and sound, elasticity, fluids, heat, electricity, magnetism, electromagnetic radiation, light and optics and modern physics. As in General Physics I this course will continue to relate principles of physics to living systems. Laboratory work will further develop the student's skills in data collecting and analysis. This course satisfies the physics requirement of the AS Biological Science program. This course does not satisfy the physics requirement of the AA Chemical Science or Physics/Engineering concentrations or the physics requirement of the AS Engineering program. Prerequisite: Grade of C or better in General Physics I/Lab (PHY201).	**4**

PHY-251	**College Physics I/Lab**	This course is an introduction to some of the fundamental principles and concepts of physics, using a problem-solving approach. The topics considered include the basic equations of motion, Newton's laws and their applications, work, energy, momentum, rotational kinematics and dynamics, conservation laws, laws of universal gravitation, and simple harmonic and oscillatory motion. Course meets: 3 hrs. lecture; 3 hrs. lab. Prerequisite: Grade of C or better in Calculus I (MAT281).	**4**
PHY-252	**College Physics II/Lab**	In the first half of the course, this continuation of College Physics I (PHY251) covers the following topics: basic topics in electricity and magnetism, electromagnetic radiation, the nature of light, and optics. In the second half, the course covers an introduction to some basic ideas in modern physics. It also covers these additional topics: atomic structure, quantization, and nuclear physics. Course meets: 3 hrs. lecture; 3 hrs. lab. Prerequisite: College Physics I/Lab (PHY251). Pre/co-requisite: Grade of C or better in Calculus II (MAT282).	**4**
PLG-201	**Family Law**	This course covers the laws concerning family relationship, marriage, cohabitation, adoption, divorce, child custody, support, alimony, and the effects of wills and probate. Prerequisite: Introduction to Law (PLG101).	**3**
PLG-299	**Paralegal Internship**	An internship in Paralegal Studies is a hands-on learning experience at law firms, public agency, corporation, or other law related organizations, under the direct supervision of a legal professional. It is intended to provide students the opportunity to gain practical experience in their field of study. Students perform 150 hours of internship service over the course of 10-15 weeks, during the spring, fall, or summer semesters. Prerequisites: Completion of all PLG required courses. Pre/co-requisite: a cumulative grade point average of at least 3.0 in the program and approval of the paralegal faculty internship coordinator. Students meet bi-weekly with their advisor to prepare papers, work on related projects, and share experiences with other students. Students are responsible for following all guidelines in the BHCC Internship Handbook.	**3**

PMT-299	**Pharmacy Practicum/Seminar**	This course combines group discussion in a seminar setting with an internship program based in a live pharmacy setting. The practicum and seminar are designed to give the student practical experience in the basic roles the technician fulfills in the pharmacy and to complete their preparation fro transition to the workplace. The experience component encompasses the steps from customer service to prescription processing and prescription production. The shared learning experience in the weekly seminar will be used as a problem solving group discussion and to prepare the student to apply and compete for work. Prerequisites: Writing Skills II (ENG095) or placement.	**4**
PNP-113	**Practical Nursing III**	This course builds upon the concepts introduced in Practical Nursing II (PNP112). Students use critical thinking skills in the application of the nursing process. Students provide nursing care to the geriatric patient, the childbearing family and pediatric patients. Additional expenses may include supplies, equipment and uniforms. Course meets 6 hours of lecture/lab 1-2 days per week and 18 hours of clinical practice in the college or at selected health care facilities each week. Prerequisite: Practical Nursing II (PNP112) and Human Growth and Development (PSY213).	**10**
PSY-101	**Principles of Psychology**	This introductory psychology course covers a survey of information and theory. Topics include the brain and behavior, research methods, learning, consciousness, motivation, emotion, human growth and development, personality, abnormal behavior, and psychotherapy, social cognition and understanding. The course meets General Education "Individual and Society" Requirement Area 2. Prerequisite: Academic Reading III (ESL098) or Reading Skills II (RDG095) or co-enrollment in integrated courses, or exemption by placement testing.	**3**
PSY-107	**Group Dynamics**	Through class exercises and observation, this course explores the relationship between the theory and experience of effective groups. It examines comparisons of individual and group performance, group goals, problem solving, decision-making, conformity, norms, cohesiveness, and leadership. The course meets General Education Individual and Society Requirement Area 2. Co-requisite: For Office and Information Management majors, Office and Information Management: Technology on the Move (OIM199).	**3**

PSY-203	**Psychology of Personal Adjustment**	This course explores the development and expression of the personality through an examination of processes by which the self-concept is formed. The course surveys the theories of behavioral scientists that have contributed to the study of adjustment. Scientific study of the effects of stress and stress management techniques are included in this curriculum. The course prepares students for advanced study in psychology and places emphasis on critical thinking skills, especially as applied to scientific research. Prerequisite: Grade of C or higher in Principles of Psychology (PSY101) or permission of instructor.	**3**
PSY-209	**Child Psychology**	This course examines the normal physical, cognitive and socio-emotional development of children from conception to age twelve. This course is to be used for meeting the requirements of the A.A. Psychology Concentration or for elective credit in other programs. However, this course may not be used to meet program requirements for degrees or certificates in the ECDev, EDU, or HSV programs. Students may not receive credit for both PSY209 and ECE103 to meet requirements for degrees or certificates for college graduation. Prerequisite: Grade of C or better in Principles of Psychology (PSY101).	**3**
PSY-213	**Human Growth and Development**	This course examines the theories of the biological, social, and psychological development of human beings throughout the life span. This course may be taken either as a prerequisite course for the pre-nursing program, or as an elective by non-Psychology majors. The course does not satisfy the requirements of the A.A. Psychology Concentration program. Prerequisite: Grade of C or better in Principles of Psychology (PSY101).	**3**
PSY-215	**Counseling**	This course explores theories and practices in counseling individuals and groups. It explores various theoretical approaches to counseling, and provides practical exercises in counseling. This course is restricted to those students enrolled in the Human Services, Education, Early Childhood, Psychology, or Sociology programs or by permission of the department chair of Education, Early Childhood, and Human Services or the department chair of Behavioral Sciences. Prerequisite: Grade of C or higher in Principles of Psychology (PSY101).	**3**

PSY-219	**Social Psychology**	This course covers the complex interrelationship between the individual, small groups, and the greater society. Topics include attitude formation and change, social conflict, prejudice, frustration, and cooperation versus competition and aggression. Prerequisite: Grade of C or higher in Principles of Psychology (PSY101).	**3**
PSY-223	**Personality**	This course covers distinctive patterns of behavior, including the thoughts and emotions that characterize individuals' adaptation to life. It examines four major approaches to the study of personality: psychoanalytic, behavioral, trait dispositional, and humanistic. Students study varying degrees of emphasis on processes or forces impinging on individuals' interaction with their environment. Prerequisite: Grade of C or higher in Principles of Psychology (PSY101).	**3**
PSY-224	**Adolescent & Adult Development**	In this course, students study adolescents and adults in the areas of physical, intellectual and social changes, and their emotional growth and development during life stages of adolescence and adulthood. Prerequisite: Grade of C or higher in Principles of Psychology (PSY101).	**3**
PSY-227	**Abnormal Psychology**	This advanced course for the serious student of psychology covers the history of mental illness and its treatment, modern classification, diagnosis, the theoretical causes of disorders, and treatments. The range of psychopathology extends from the disorder-free person to adjustment reactions, anxiety disorders, personality disorders, and borderline disorders, to psychosis and major disorders. Prerequisite: Grade of C or higher in Principles of Psychology (PSY101) or permission of instructor.	**3**
PSY-235	**Introduction to Behavioral Research**	This course is an introduction to the ways of discovering, describing, and making warranted assertions about aspects of people and social life. The chief objectives are 1) to help students develop the skills and knowledge necessary to become intelligent critics of research in the behavioral and social sciences, and 2) to give them a rudimentary understanding of the design and evaluation of scientific research. Statistical material is treated in a conceptual manner. Prerequisite: Principles of Psychology (PSY101).	**3**

RDG-095	**Reading Skills II**	This course develops advanced reading skills necessary for success with college level material. The course will focus on achieving college level comprehension skills and vocabulary. In particular, students will recognize and articulate main ideas, supporting details, and patterns of organization. Students will develop critical reading and thinking skills and improve vocabulary. In addition, students will improve note-taking and test-taking skills. Note: Students must meet exit-level requirements or pass a departmental reading final in order to earn a passing grade of C in this course. Prerequisite: Grade of C or better in Reading Skills I (RDG090) or placement by examination.	**3**
SGT-107	**Surgical Technology III**	This course provides a direct focus on performance in the clinical setting. Students participate as independent members of the surgical team, demonstrating beginning level competence of advanced skills and anticipation of surgical needs. Prerequisite: Surgical Technology II (SGT106).	**3**
SOC-101	**Principles of Sociology**	This course covers an introduction to the concepts and theories of society and social institutions. The course meets General Education 'Individual and Society' Requirement Area 2. Prerequisite: Academic Reading III (ESL098) or Reading Skills II (RDG095) or co-enrollment in integrated courses or exemption from reading requirement by placement testing.	**3**
SOC-109	**Cultural Anthropology**	This course demonstrates the way that the basic concepts and techniques developed by cultural anthropologists help us understand various cultures and intercultural relations. Through ethnographic readings and films, students learn about kinship, gender, ethnicity, religion, and social change in a variety of cultures. The course increases awareness of cultural dimensions of human experience and the diversity and flexibility of human cultures. The course meets General Education "Individual and Society" Requirement Area 2. Prerequisite: Academic Reading III (ESL098) or Reading Skills II (RDG095) or co-enrollment in integrated courses or exemption from reading requirement by placement testing.	**3**

SOC-110	**Physical Anthropology**	Presented in four basic sections, this course covers an introduction to the field of physical anthropology, genetics, human evolution, and evolution of behavior. Module topics include the background of physical anthropology; man in the natural world; practical genetics; classification within the human species; homo sapiens; homo erectus; the Australopithecines; evolution review; what was before man; evolution of behavior; where do we go from here? This course is offered through the Center for Self-Directed Learning only.	**3**
SOC-205	**Urban Sociology**	This course covers the problems of social issues of contemporary urban life. It covers individuals' responses to cultural, racial, political, institutional, educational, economic, and other challenges of city life. Prerequisite: Principles of Sociology (SOC101).	**3**
SOC-206	**Juvenile Delinquency**	The course analyzes the nature and types of juvenile behavior that violate the law. Students study issues such as socialization, deviant roles, social processes, the special attributes of youth, and historical attitudes toward childhood and adolescence. Topics include family juvenile court, correctional institutions, causes of delinquency, the female delinquent, and prevention and treatment of delinquency.	**3**
SOC-207	**Criminology**	This course examines various aspects of crime from the perspective of the sociologist. The course emphasizes social structure/social process theories of social disorganization and crime causation. Other topics include the history of criminology, the nature and extent of crime, the measurement of crime, criminal typologies, public order crime, victims, and victimization. Prerequisite: Principles of Psychology (PSY101) or Principles of Sociology (SOC101).	**3**
SOC-211	**The Family**	This course examines psychological and sociological factors related to the dynamics of family life. The course covers the process of the growth and adjustment of each family member as the family structure changes. Students discuss the historical, contemporary, and future family. Prerequisite: one introductory Behavioral Science course.	**3**

SOC-229	**Sociology of Film**	This course deciphers the explicit and implicit message contained in films that has to do with the organization and structure of culture and society from the past to the present. The course covers the idea that, like all art forms, films are created in a social context and express a particular point of view through the characters, themes, motifs, and visual styles they embody.	**3**
SON-123	**General Sonography Clinical II**	This hybrid course is a combination of classroom teaching and an online learning experience. This course continues with the presentation and physics of ultrasound. Special attention is given to the Doppler affect and its relevance in the field of general sonography. Sonographic artifacts, harmonics, contrast agents, bioeffects and safety are covered as well. Review from Ultrasound Instrumentation I is covered in the form of online weekly registry review tests. Prerequisite: Ultrasound Instrumentation (MIG105). Co-requisite: General Sonography Clinical III (SON223).	**3**
SON-227	**General Sonography Clinical V**	This course is the hands on application of ultrasound in the hospital setting. Scanning skills are developed during this clinical. Students will be performing supervised ultrasounds and present daily cases to sonographers and or physicians. Students will become acquainted with the responsibilities needed to work in the ultrasound setting. Clinical will take place 3 days a week. Prerequisite: General Sonography Clinical IV (SON225).	**3**
SPN-101	**Elementary Spanish I**	This course, for students with little or no previous knowledge of Spanish, covers an introduction to the sounds and structures of Spanish and the development of basic skills needed for understanding and speaking Spanish. The course is not intended for native speakers or for students who have studied this language within the last three years.	**3**
SPN-102	**Elementary Spanish II**	This continuation course of Elementary Spanish I (SPN101) emphasizes conversational skills and simple readings. The course meets General Education "Humanities" Requirement Area 6. Prerequisite: Elementary Spanish I (SPN101) or one year of high school Spanish.	**3**

THE-107	**Acting I**	This course covers a total approach to the actor's art and stresses the use of body and voice. It includes improvisation, theater games, and sensory exercises with eventual involvement in scene study and character development. This course meets General Education "Humanities" Requirement Area 6.	**3**
THE-115	**Playwriting**	This course introduces students to various approaches to writing for the stage. Components of playwriting, which include narrative, structure, plot, character, dialogue, and setting, as well as the concept of "theatre" will be explored. Through reading and discussion of short works by a selection of playwrights, students will garner a sense of the development of playwriting while also being exposed to various playwriting genres. During the semester, students will create short works for the stage. Weekly writing exercises will be shared and discussed in class.	**3**
VMA-104	**Drawing I**	An introductory studio course designed to examine basic vocabulary and drawing skills and concepts. Using a wide range of drawing media, students work primarily from observation mastering the concepts of objective drawing. While concentrating on the formal visual elements: line, shape, value, texture and (limited) color, students explore such concepts as figure/ground, scale, positive and negative space, proportion, perspective, volume, light, compositional issues and pictorial unity. There is an emphasis on writing and communication skills for mastery of basic vocabulary, and process of evaluation and critique. This course meets General Education "Humanities" Requirement Area 6. Prerequisite: Writing Skills II (ENG095).	**3**
VMA-105	**Digital Imaging With Photoshop**	The Adobe Photoshop workspace reflects the technical basis of the digital image. Understanding the structure of this important application enables the student to systematically build confidence and skill in its use, and also apply its principles in related applications. This course surveys the breadth and depth of the Photoshop workspace and toolset through lecture presentations and lab exercises. An overview of the digital imaging workflow will be presented, with emphasis on image processing. Students must have basic computer literacy. Prerequisite: Writing Skills II (ENG095) and Foundations of Mathematics (MAT093).	**3**

VMA-111	**Introduction to Mass Media**	This course covers an overview of the history and theory of mass media, including print, radio, television, the Internet, movies, advertising and public relations. The course covers general concepts of mass media, the media industries, and practical methods to analyze and understand the influence of the mass media on social, cultural, and political life, not only in the United States, but also around the globe. In addition, the course looks at ways individuals themselves can influence the media. The course meets General Education World View Requirement Area 3. Prerequisites: Writing Skills II (ENG095) and Foundations of Mathematics (MAT093).	**3**
VMA-112	**Art History: Prehistoric to Medieval**	The course is a broad multicultural survey of the art and architecture of Egypt, Rome, Greece, the Near, Mid, and Far East, and Europe, from the Paleolithic Era through the Moyen Age. The course stresses the understanding of art through examining visual concepts such as composition, space, rhythm, symmetry, perspective, and subject matter, as well as its social, political, and cultural contexts. Students will experience and analyze works of art through lectures, written assignments, journal entries, identification and essay exams, presentations, group projects, and visits to museums. The course meets General Education "Humanities" Requirement Area 6. Prerequisites: Writing Skills II (ENG095) and Foundations of Mathematics (MAT093).	**3**
VMA-113	**Art History: Renaissance-Contemporary**	This course is a broad multicultural survey of art and architecture from the Early Renaissance through contemporary times. Major movements in both Western and non-Western traditions are covered. The course stresses the understanding of art through examining visual concepts such as composition, space, rhythm, symmetry, perspective, and subject matter, as well as its social, political and cultural contexts. Students will experience and analyze works of art through lectures, written assignments, journal entries, identification and essay exams, presentations, group projects, and visits to museums. The course meets General Education "Humanities" Requirement Area 6. Prerequisites: Writing Skills II (ENG095) and Foundations of Mathematics (MAT093).	**3**

VMA-122	**Painting I**	This course instructs students in the painting medium of acrylic and/or oil paint. The course places emphasis on drawing, composition, color, value, and paint quality. Students acquire basic skills in painting from observation. Class time includes one-on-one instruction and group critiques. The course meets General Education Humanities Requirement Area 6. Prerequisites: Writing Skills II (ENG095) and Foundations of Mathematics (MAT093).	**3**
VMA-123	**Water Color I**	An introduction to the medium of watercolor paint, this course demonstrates and explores basic techniques such as wet-on-dry, wet-on-wet, and washes. Students draw from observation and learn to manipulate value, tone, and color. Class time includes one-on-one instruction and group critiques. The course meets General Education Humanities Requirement Area 6. Prerequisites: Writing Skills II (ENG095) and Foundations of Mathematics (MAT093).	**3**
VMA-151	**Introduction to Audio Technology**	This course will provide the student with the basic knowledge and skills required for audio production. Through lectures and hands-on lab work, students will learn the technical and aesthetic aspects of microphones, tape decks, and mixing consoles. Both digital and analog production media will be covered, with greater emphasis on the digital realm. In addition to technical abilities, students will also examine the nature of the acoustic environment, and will be introduced to digital audio editing software. Prerequisites: Writing Skills II (ENG095) and Foundations of Mathematics (MAT093).	**3**

VMA-161	**Introduction to Digital Photography**	Digital photography has made it technically possible to generate countless photographs at virtually no cost, yet the formal problems of picture-making remain. How is it possible to create photographs with power and significance? This course explores basic technical issues of the digital photography workflow joined with a formal exploration of seeing photographically, using both shooting assignments and lab exercises. Examples from the photographic tradition will be examined. Adobe Photoshop is used to adjust and manipulate images for printing. Inkjet printers are used to create photographic quality output. Students must have a digital camera and basic computer literacy. This course fulfills General Education Humanities Requirement Area 6. Prerequisites: Writing Skills II (ENG095) and Foundations of Mathematics (MAT093).	**3**

Bunker Hill Community College

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