2013 – 2014
Academic Catalog
Manchester Community College
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Accounting and Business Administration Transfer, A.S.

Program Design
The Accounting and Business Administration Transfer associate degree program is designed for students who plan to earn a bachelor’s degree in accounting, business administration or marketing. This program provides a broad liberal arts background consisting mostly of courses normally taken in the first two years at a baccalaureate college or university. In addition, students will take courses in accounting and business administration. Advanced courses should be taken at the institution to which you transfer. Students should be familiar with the requirements of the institutions to which they will transfer. Therefore, we encourage selection of transfer institutions as early as possible. Students should see an advisor before choosing elective courses because each transfer institution may have specific requirements.

Curriculum
We recommend that students have a sound foundation in mathematics before entering this program. Take the assessment test early to determine your level of mathematical ability. Students must achieve at least a C or better in an accounting course to continue on to the next level. Note: To take a business course numbered 100 or higher, students must be eligible for ENG* 101. To take an accounting course numbered 100 or higher, students must be eligible for ENG* 101 and MAT* 095 or higher.

Learning Outcomes
Upon successful completion of all Accounting and Business Administration Transfer degree program requirements, graduates will
1. Demonstrate relevant content knowledge in required core business disciplines (accounting, business law, management and organizational behavior, and marketing) and apply concepts in problem solving through identifying and evaluating alternative solutions and offering a well-supported conclusion.
2. Recognize proper business acumen and decorum in professional interactions; demonstrate appropriate interpersonal communication and presentation skills and demeanor; demonstrate the ability to use presentation and team interpersonal skills effectively in class presentations.
3. Recognize and respond thoughtfully to situations that present ethical dilemma, demonstrating the ability to identify ethical dilemmas and social responsibilities of business, an ability to confront ethical dilemmas, and apply ethical principles to business situations using concepts learned.
4. Apply concepts in core business disciplines and critical thinking skills to make sound financial decisions.
5. Demonstrate an understanding of the interrelationships between accounting and business courses.

In addition, the graduate will complete the comprehensive learning outcomes identified with the General Education Core.
Accounting & Business Administration Requirements

- ACC* 115: Financial Accounting 4 Credits
- COM* 173: Public Speaking 3 Credits
- ENG* 101: Composition 3 Credits (Gen Ed - Mode 2)
- MAT* 165: Elementary Statistics with Computer Applications 4 Credits (Gen Ed - Mode 4)
- Choose one course from Gen Ed - Mode 5 3-4 Credits †

Subtotal: 17-18

- ACC* 118: Managerial Accounting 4 Credits
- ECN* 101: Principles of Macroeconomics 3 Credits
- ENG* 110: Introduction to Literature 3 Credits (Gen Ed - Mode 3) †‡
- PSY* 111: General Psychology I 3 Credits (Gen Ed - Mode 6)
- BMG* 202: Principles of Management 3 Credits

Subtotal: 16

- BMG* 204: Managerial Communication 3 Credits †‡ or
- Choose one from Gen Ed - Mode 6 3 Credits †‡

- BMG* 210: Organizational Behavior 3 Credits or
- PSY* 247: Industrial and Organizational Psychology 3 Credits

- ECN* 102: Principles of Microeconomics 3 Credits
- MAT* 158: Functions, Graphs & Matrices 3 Credits
- BBG* 234: Legal Environment of Business 3 Credits

Subtotal: 15

- BMK* 201: Principles of Marketing 3 Credits
- BFN* 202: Corporate Finance 4 Credits
- MAT* 230: Applied Calculus with a Modeling Approach 3 Credits
- Choose one course from Gen Ed - Mode 1 3 Credits †††

- BBG* 236: Commercial Law 3 Credits or
- PHL* 101: Introduction to Philosophy 3 Credits or
- PHL* 111: Ethics 3 Credits or
- PHL* 131: Logic 3 Credits

Subtotal: 16

Total Credits Required: 64-65

Note:
† A 4-credit laboratory science is recommended by most baccalaureate institutions for Mode 5.
‡‡ See a faculty advisor.
‡‡‡ ART* 101, ART* 102, MUS* 101, MUS* 102 and ART* 206 are recommended by most baccalaureate colleges for Mode 1.
Accounting, A.S.

Program Design

The Accounting associate degree program prepares students for employment as junior accountants, bookkeepers, and accounts receivable/payable and payroll associates. Graduates will be able to maintain complete sets of accounting records and prepare financial statements and individual tax returns. Students have the opportunity to participate in the Volunteer Income Tax Assistance (VITA) program, in which they gain practical experience in the preparation of tax returns. Students interested in transferring to earn a bachelor’s degree should enroll in the Accounting and Business Administration Transfer, A.S. degree program.

Note: Students should meet with a faculty advisor to plan their program of study.

Curriculum

Students may enroll full- or part-time. Since some courses are not offered in both the fall and spring semesters, see an advisor about your schedule. Note: All business and accounting courses, except for BBG* 108 (formerly QM 110), have prerequisites. Check catalog course description before registering.

Learning Outcomes

Upon successful completion of all Accounting degree program requirements, graduates will

1. Demonstrate relevant content knowledge in required core business disciplines (accounting, business law, management and organizational behavior, and marketing) and apply concepts in problem solving through identifying and evaluating alternative solutions and offering a well-supported conclusion.

2. Recognize proper business acumen and decorum in professional interactions; demonstrate appropriate interpersonal communication and presentation skills and demeanor; demonstrate the ability to use presentation and team interpersonal skills effectively in class presentations.

3. Recognize and respond thoughtfully to situations that present ethical dilemma, demonstrating the ability to identify ethical dilemmas and social responsibilities of business, an ability to confront ethical dilemmas, and apply ethical principles to business situations using concepts learned.

4. Apply accounting concepts and critical thinking skills to make sound financial decisions.

5. Demonstrate an understanding of the interrelationships between accounting and business courses.

In addition, the graduate will complete the comprehensive learning outcomes identified with the General Education Core.
Accounting Requirements

- ACC* 115: Financial Accounting 4 Credits
- BBG* 101: Introduction to Business 3 Credits
- BBG* 234: Legal Environment of Business 3 Credits
- ENG* 101: Composition 3 Credits (Gen Ed - Mode 2)
- BBG* 108: Business & Consumer Finance 3 Credits (formerly QM 110)‡

Subtotal: 16

- ACC* 118: Managerial Accounting 4 Credits
- BBG* 236: Commercial Law 3 Credits
- Choose one Business or CSA* Elective 2-3 Credits ‡‡
- ACC* 125: Accounting Computer Applications I 3 Credits
- ECN* 102: Principles of Microeconomics 3 Credits (Gen Ed - Mode 6)
- Choose one course from Gen Ed - Mode 3 or Gen Ed - Mode 6 3 Credits

Subtotal: 18-19

- BMG* 204: Managerial Communication 3 Credits or
- ACC* 290: Cooperative Education/Work Experience 3 Credits ‡‡‡

- ACC* 275: Principles of Intermediate Accounting I 4 Credits
- ACC* 241: Federal Taxes I 3 Credits
- COM* 173: Public Speaking 3 Credits (Gen Ed - Mode 3)
- Choose one from Gen Ed - Mode 4 3 Credits

Subtotal: 16

- ACC* 231: Cost Accounting I 3 Credits ‡‡‡‡ or
- ACC* 251: Fund Accounting 3 Credits ‡‡‡‡

- ACC* 276: Principles of Intermediate Accounting II 4 Credits
- BFN* 202: Corporate Finance 4 Credits
- Choose one course from Gen Ed - Mode 1 3 Credits
- Choose one course from Gen Ed - Mode 5 3 Credits

Subtotal: 17

Total Credits Required: 67-68

Note:

‡ Students who receive credit for QM 110 have fulfilled the BBG* 108 requirement.
‡‡ Business elective includes courses with designations of ACC*, BES*, BFN*, BFP*, BBG*, BMG*, BMK*. Students without a strong foundation in computer skills should take CSA* 105: Introduction to Software Applications.
‡‡‡ ACC* 290 is offered as an option for students who have a GPA of at least 2.0 and 15 credits completed toward their degrees, including ACC* 115, 102 and 201. Permission of Cooperative Education director is required.
‡‡‡‡ Students who are interested in a manufacturing environment should take ACC* 231: Cost Accounting I. Students who want to do local, state, federal, hospital, fundraising or college/university accounting should take ACC* 251: Fund Accounting.
Administrative Assistant, Legal Option, Business Office Technology, A.S.

Program Design

The Administrative Assistant, Legal Option, Business Office Technology associate degree program provides students with a broad understanding of the court systems and the many fields of law. Students become proficient in keyboarding/data-entry, word processing, legal terminology and legal transcription of computerized communication, office applications and procedures. Students are encouraged to develop individual areas of interest through elective courses and through part-time and summer employment. Legal administrative assistants use technology to originate, access, manage and manipulate information. In addition they may function independently in initiating office communications, accessing and tracking records and information, and problem solving the various details of the day-to-day office operations. They participate in the representation of, and communication with, clients and in the preparation of court papers, legal documents and correspondence.

Curriculum

Students may enroll in this program full- or part-time.

Learning Outcomes

Upon successful completion of all Administrative Assistant, Legal Option, BOT degree program requirements, graduates will

1. Create and modify standard types of business communications in both printed and electronic forms.
2. Demonstrate strong interpersonal and human relations skills required for success in a professional setting.
3. Execute business office procedures used in today's technological work environment.
4. Perform and analyze office accounting tasks and activities.
5. Define and apply legal terminology used when preparing forms, documents and transcribed material.
6. Acquire up-to-date technology skills in the following areas: word processing, spreadsheet, database, presentation, computerized accounting, personal information management, web technologies, and speech recognition.
7. Demonstrate keyboarding and data-entry speed and accuracy using industry accepted standards.
8. Recognize and explain the importance of confidentiality in dealing with legal matters.

In addition, the graduate will complete the comprehensive learning outcomes identified with the General Education Core.
Administrative Assistant, Legal Options, A.S.
Business Office Technology Requirements

- BOT* 122: Writing Procedures 3 Credits
- BOT* 111: Keyboarding for Info Pro 13 Credits
- CST* 114: Web Essentials 3 Credits
- ENG* 101: Composition 3 Credits (Gen Ed - Mode 2)
- PSY* 247: Industrial and Organizational Psychology 3 Credits (Gen Ed - Mode 6)
- MAT* 109: Quantitative Literacy 3 Credits (Gen Ed - Mode 4) or higher
  Subtotal: 18

- BOT* 112: Keyboarding for Info Pro II 3 Credits or
  BOT* 137: Word Processing Applications 3 Credits
- BOT* 164: Office Accounting 3 Credits or
  ACC* 115: Financial Accounting 4 Credits
- BOT* 171: Legal Documents 3 Credits
- COM* 173: Public Speaking 3 Credits or
  ENG* 200: Advanced Composition 3 Credits (Gen Ed - Mode 3)
  Subtotal: 12-13

- BOT* 230: Microsoft Office Suite Applications 3 Credits or
  CSA* 105: Introduction to Software Applications 3 Credits
- ACC* 121: Introduction to Accounting Software 1 Credits
- BOT* 251: Administrative Procedures 3 Credits
- ENG* 202: Technical Writing 3 Credits or
  Cross-listed courses (choose one)
    ENG* 203: Grammar, Usage and Style 3 Credits
    BOT* 139: Grammar, Usage and Style 3 Credits
- BOT* 270: Legal Terminology and Transcription 3 Credits
- Choose one course from Gen Ed - Mode 1 3 Credits
  Subtotal: 16

- BOT* 231: Advanced Microsoft Office Applications 3 Credits
- BOT* 220: Computerized Communication 3 Credits
- CSA* 135: Spreadsheet Applications 3 Credits
- Choose one course from Gen Ed - Mode 3 3 Credits
- Choose one course from Gen Ed - Mode 5 3-4 Credits
  Subtotal: 15-16

Total Credits Required: 61-63

Note:
Students may elect to substitute BOT* 296: Cooperative/Work Experience for any equivalent
BOT credit course with prior departmental approval.
Administrative Assistant, Medical Option, Business Office Technology, A.S.

Program Design

The Administrative Assistant, Medical Option, Business Office Technology associate degree program prepares students with the skills and knowledge necessary to excel and contribute as a positive team member in the medical office environment. Students become proficient in keyboarding/data-entry, word processing, medical terminology, digital medical transcription, computerized communication, and state-of-the-art medical software simulations integrating Practice Management/EHR, and medical administrative procedures. Sociology and biology courses are also included in this program.

Curriculum

Students may enroll in this program full- or part-time.

Learning Outcomes

Upon successful completion of all Administrative Assistant, Medical Option, BOT Degree program requirements, graduates will
1. Create and modify standard types of business communications in both printed and electronic forms.
2. Demonstrate appropriate interpersonal and human relations skills required for success in a professional setting.
3. Execute medical office procedures used in today's technological work environment.
5. Define and apply medical terminology.
6. Demonstrate accuracy in medical billing and coding procedures.
7. Acquire up-to-date technology skills in the following areas: word processing, spreadsheet, database, presentation, computerized accounting, personal information management, web technologies, and speech recognition.
8. Demonstrate keyboarding and data-entry speed and accuracy using industry accepted standards.
9. Understand and adhere to the importance of federal regulations, medical ethics, legal implications, and patient confidentiality when handling protected health information.

In addition, the graduate will complete the comprehensive learning outcomes identified with the General Education Core.
Administrative Assistant, Medical Option, A.S.
Business Office Technology Requirements

- BOT* 122: Writing Procedures 3 Credits
- BOT* 111: Keyboarding for Info Pro I 3 Credits
- BOT* 180: Medical Terminology 3 Credits
- CST* 114: Web Essentials 3 Credits
- ENG* 101: Composition 3 Credits (Gen Ed - Mode 2)
- MAT* 109: Quantitative Literacy 3 Credits (Gen Ed - Mode 4) or higher
  **Subtotal: 18**
- BOT* 288: Medical Practice Management Software Applications 3 Credits
- BOT* 220: Computerized Communication 3 Credits
- BOT* 112: Keyboarding for Info Pro II 3 Credits or
- BOT* 137: Word Processing Applications 3 Credits
- BOT* 164: Office Accounting 3 Credits or
- ACC* 115: Financial Accounting 4 Credits
- ENG* 200: Advanced Composition 3 Credits (Gen Ed - Mode 3) or
- COM* 173: Public Speaking 3 Credits (Gen Ed - Mode 3)
  **Subtotal: 15-16**
- BOT* 230: Microsoft Office Suite Applications 3 Credits or
- CSA* 105: Introduction to Software Applications 3 Credits
- BOT* 181: Medical Coding I 3 Credits
- BOT* 282: Medical Administrative Procedures 3 Credits
- ACC* 121: Introduction to Accounting Software 1 Credits
- BIO* 115: Human Biology 4 Credits (Gen Ed - Mode 5)
- SOC* 101: Principles of Sociology 3 Credits (Gen Ed - Mode 6)
  **Subtotal: 17**
- BOT* 182: Medical Coding II 3 Credits
- BOT* 287: Foundations/Management Medical Insurance 3 Credits
- Choose one course from Gen Ed - Mode 3 3 Credits
- Choose one course from Gen Ed - Mode 1 3 Credits
- ENG* 202: Technical Writing 3 Credits or
  Cross-listed courses (choose one)
- ENG* 203: Grammar, Usage and Style 3 Credits
- BOT* 139: Grammar, Usage and Style 3 Credits
  **Subtotal: 15**

**Total Credits Required: 65-66**

Note:
Students may elect to substitute BOT* 296: Cooperative/Work Experience for any equivalent BOT credit course with prior departmental approval.
Administrative Assistant, Office Option, Business Office Technology, A.S.

Program Design

The Administrative Assistant, Office Option, Business Office Technology associate degree program provides students with the skills necessary to excel in the office environment. Students become proficient in keyboarding, word processing, computerized communications, and office applications and procedures. Students are encouraged to develop individual areas of interest through elective courses and through part-time and summer employment. Administrative assistants use technology to originate, access, manage and manipulate information. In addition, they function independently in initiating office communications, accessing and tracking records and information, and problem solving the various details of the day-to-day office operations. As members of management teams, they are able to assume responsibility and work independently to exercise initiative and judgment, and to adapt to new concepts and products.

Curriculum

Students may enroll in this program full- or part-time.

Learning Outcomes

Upon successful completion of all Administrative Assistant, Office Option, BOT degree program requirements, graduates will

1. Create and modify standard types of business communications in both printed and electronic forms.
2. Demonstrate strong interpersonal and human relations skills required for success in a professional setting.
3. Execute business office procedures used in today's technological work environment.
4. Perform and analyze office accounting tasks and activities.
5. Acquire up-to-date technology skills in the following areas: word processing, spreadsheet, database, presentation, computerized accounting, personal information management, web technologies, and speech recognition.
6. Demonstrate keyboarding and data-entry speed and accuracy using industry accepted standards.

In addition, the graduate will complete the comprehensive learning outcomes identified with the General Education Core.
Administrative Assistant, Office Option, A.S. Business Office Technology Requirements

- BOT* 122: Writing Procedures 3 Credits
- BOT* 111: Keyboarding for Info Pro I 3 Credits
- CST* 114: Web Essentials 3 Credits
- ENG* 101: Composition 3 Credits (Gen Ed - Mode 2)
- PSY* 247: Industrial and Organizational Psychology 3 Credits (Gen Ed - Mode 6)
- MAT* 109: Quantitative Literacy 3 Credits (Gen Ed - Mode 4)
  **Subtotal: 18**

- BOT* 112: Keyboarding for Info Pro II 3 Credits or
- BOT* 137: Word Processing Applications 3 Credits
- BOT* 164: Office Accounting 3 Credits or
- ACC* 115: Financial Accounting 4 Credits
- BOT* 220: Computerized Communication 3 Credits
- ENG* 200: Advanced Composition 3 Credits (Gen Ed - Mode 3) or
- COM* 173: Public Speaking 3 Credits (Gen Ed - Mode 3)
  **Subtotal: 12-13**

- ACC* 121: Introduction to Accounting Software 1 Credits
- BOT* 251: Administrative Procedures 3 Credits
- ENG* 202: Technical Writing 3 Credits or
  Cross-listed courses (choose one)
- ENG* 203: Grammar, Usage and Style 3 Credits
- BOT* 139: Grammar, Usage and Style 3 Credits
- BOT* 230: Microsoft Office Suite Applications 3 Credits or
- CSA* 105: Introduction to Software Applications 3 Credits
- GEO* 204: Geography and Tourism Development 3 Credits or
- GEO* 101: Introduction to Geography 3 Credits
- Choose one course from Gen Ed - Mode 5 3-4 Credits
  **Subtotal: 16-17**

- BBG* 234: Legal Environment of Business 3 Credits or
- BMG* 204: Managerial Communication 3 Credits
- BOT* 231: Advanced Microsoft Office Applications 3 Credits
- CSA* 135: Spreadsheet Applications 3 Credits
- Choose one course from Gen Ed - Mode 1 3 Credits
- Choose one course from Gen Ed - Mode 3 3 Credits
  **Subtotal: 15**

**Total Credits Required: 61-63**

**Note:**
Students may elect to substitute BOT* 296: Cooperative/Work Experience for any equivalent BOT credit course with prior departmental approval.
Business Administration Career, A.S.

Program Design
The Business Administration Career associate degree program prepares graduates for employment as management trainees and for entry-level positions in banks, insurance companies and governmental agencies. It is a general business program requiring students to take courses in accounting, business law, economics, management and corporate finance. Although many courses in this program may be transferred, it is possible that some will transfer only as electives. Students planning to earn a bachelor’s degree should enroll in the Accounting and Business Administration Transfer program. This program is of considerable benefit to employed students looking for professional development or students who hold degrees in unrelated areas and are looking for a career specialty or career change. Note: Students should meet with a faculty advisor to plan their program of study.

Curriculum
Students may attend full- or part-time. Students must achieve at least a C- or better in an accounting course to continue on to the next level. Note: All business and accounting courses, except for BBG* 108 (formerly QM 110), have prerequisites. All accounting courses numbered 100 or higher require students to be eligible for ENG* 101 and MAT* 095 or higher.

Learning Outcomes
Upon successful completion of all Business Administration Career degree program requirements, graduates will

1. Demonstrate relevant content knowledge in required core business disciplines (accounting, business law, management and organizational behavior, and marketing) and apply concepts in problem solving through identifying and evaluating alternative solutions and offering a well-supported conclusion.

2. Recognize proper business acumen and decorum in professional interactions; demonstrate appropriate interpersonal communication and presentation skills and demeanor; demonstrate the ability to use presentation and team interpersonal skills effectively in class presentations.

3. Recognize and respond thoughtfully to situations that present ethical dilemma, demonstrating the ability to identify ethical dilemmas and social responsibilities of business, an ability to confront ethical dilemmas, and apply ethical principles to business situations using concepts learned.

4. Apply concepts in core business disciplines and critical thinking skills to make sound business and financial decisions.

5. Demonstrate an understanding of the interrelationships between accounting and business courses.

In addition, the graduate will complete the comprehensive learning outcomes identified with the General Education Core.
Business Administration Career Requirements

- ACC* 115: Financial Accounting 4 Credits
- BBG* 101: Introduction to Business 3 Credits
- BBG* 234: Legal Environment of Business 3 Credits
- ENG* 101: Composition 3 Credits (Gen Ed - Mode 2)
- BBG* 108: Business & Consumer Finance 3 Credits (formerly QM 110) ‡

Subtotal: 16

- ACC* 118: Managerial Accounting 4 Credits
- BBG* 236: Commercial Law 3 Credits
- Choose one course from (Gen Ed - Mode 4) 3-4 Credits ‡‡
- COM* 173: Public Speaking 3 Credits (Gen Ed - Mode 3)
- ACC* 125: Accounting Computer Applications I 3 Credits

Subtotal: 16-17

- BMG* 202: Principles of Management 3 Credits
- ECN* 102: Principles of Microeconomics 3 Credits (Gen Ed - Mode 6) or
- ECN* 101: Principles of Macroeconomics 3 Credits (Gen Ed - Mode 6)
- Business elective or ECN* 101 3 Credits ‡‡‡
- Choose one course from Gen Ed - Mode 5 3-4 Credits
- Choose one course from Gen Ed - Mode 6 3 Credits

Subtotal: 15-16

- BMK* 201: Principles of Marketing 3 Credits
- BMG* 204: Managerial Communication 3 Credits
- BFN* 202: Corporate Finance 4 Credits
- Business elective ‡‡ or CST* 205: Project Management 4 Credits
- Choose one course from Gen Ed - Mode 1 3 Credits

Subtotal: 16-17

Total Credits Required: 63-66

Note:
‡ Students who receive credit for QM 110 have fulfilled the BBG* 108 requirement.
‡‡ Recommended MAT* 138 or MAT* 165
‡‡‡ Business electives include courses with designations of ACC*, BES*, BFN*, BFP*, BBG*, BMG*, and BMK*.
Students without a strong foundation in computer skills should take CSA* 115: Windows.
Communication, A.S.

Program Design

The Communication associate degree program prepares students for employment in television as reporters, production assistants, camera operators and video editors; in radio, as on-air personnel and copywriters; in journalism, as reporters and feature writers; and in public relations, as entry-level employees. Students have the opportunity to participate in up to two semesters of media work experience with placement at area media outlets. Students are encouraged to take up to six credits of Cooperative Education/Work Experience. Any Cooperative Education/Work Experience beyond six credits will not be applied towards a degree.

Curriculum

Students may enroll in this program on a full- or part-time basis and attend classes during the day or evening. Note that to enter COM* 222 and continue the program you must receive a grade of at least B in ENG* 101 or have permission from the instructor.

Learning Outcomes

Upon successful completion of all Communication degree program requirements, graduates will
1. Write copy for radio and television.
2. Research and write newspaper and feature stories.
3. Operate video cameras.
4. Use computer-based video editing programs.
5. Conduct interviews for news stories and television programs.
6. Write scripts for radio and television programs.
7. Develop and deliver effective oral presentations.
8. Appreciate the role and effect of mass media upon society.
9. Use computer-based audio programs.
10. Use software to electronically design brochures, newsletters and other printed material.

In addition, the graduate will complete the comprehensive learning outcomes identified with the General Education Core.
Communication Requirements

- COM* 100: Introduction to Communication 3 Credits
- ENG* 101: Composition 3 Credits
- PSY* 111: General Psychology I 3 Credits (Gen Ed - Mode 6)
- COM* 173: Public Speaking 3 Credits (Gen Ed - Mode 3)
- Choose one course from Gen Ed - Mode 4 3 Credits
- COM* 240: Broadcast/TV Production 4 Credits or Cross-listed courses (choose one)
- COM* 166: Video/Filmmaking 3 Credits
- ART* 185: Video/Filmmaking 3 Credits

Subtotal: 18-19

- COM* 108: Contemporary Issues in Media 3 Credits
- COM* 222: Reporting and Writing News Stories. 3 Credits
- ENG* 110: Introduction to Literature 3 Credits
- HIS* 102: Western Civilization II 3 Credits or HIS* 202: United States History II 3 Credits or HIS* 213: The U.S. Since World War II 3 Credits
- POL* 111: American Government 3 Credits or POL* 112: State and Local Government 3 Credits

Subtotal: 15

- COM* 247: Television Writing 3 Credits
- COM* 295: Internship I 3 Credits
- COM* 213: Electronic Publishing 3 Credits
- COM* 177: Broadcasting Performance 3 Credits or COM* 242: Advanced Broadcast/TV Production 4 Credits or Cross-listed courses (choose one)
- COM* 225: Photojournalism 3 Credits
- ART* 283: Photojournalism 3 Credits Cross-listed courses (choose one)
- COM* 154: Film Study and Appreciation 3 Credits (Gen Ed - Mode 3)
- ART* 206: Film Study 3 Credits (Gen Ed - Mode 1)

Subtotal: 15-16

- COM* 101: Introduction to Mass Communication 3 Credits
- Choose one course from Gen Ed - Mode 5 3-4 Credits
- PSY* 240: Social Psychology 3 Credits or PSY* 247: Industrial and Organizational Psychology 3 Credits
- COM* 296: Internship II 3 Credits or COM* 145: Sports on Television 3 Credits
- COM* 201: Introduction to Public Relations 3 Credits or COM* 229: Creative Writing, Non Fiction. 3 Credits

Subtotal: 15-16

Total Credits Required: 63-65

Note:

* Students are encouraged to take a language as an elective.
Computer Engineering Technology, A.S.

Program Design
The Computer Engineering Technology associate degree program provides students with a broad background in the underlying disciplines of computer engineering and computer electronics technology including: the fundamentals of computer electronics, including basic AC/DC linear circuit analysis, analog and digital electronics, and microprocessor electronics to enable students to perform component and board level computer electronics analysis and troubleshooting; broad experience in problem solving with computers; the basics of computer architecture and organization; an understanding of the basics of computer operating systems and the integration of computer hardware and software; and an understanding of basic computer networking concepts and technologies including the fundamentals of network design, installation and maintenance.

Students will also acquire a comprehensive educational background in mathematics, physics and general education, in addition to acquired skills and knowledge in the field of computer engineering technology, designed to develop and enhance their critical thinking and problem analysis and resolution skills.

The Computer Engineering Technology A.S. degree program prepares students for transfer to institutions with bachelor's degree programs in computer science or other related computer science/technology programs, or for entry into computer-based industry positions and further industry-based training. Students planning to transfer to baccalaureate institutions should consult with an advisor regarding the requirements of these institutions and transferability of courses.

Curriculum
Students may enroll in this program full- or part-time. Courses are offered during daytime or evening hours. For students not prepared for the required mathematics or computer technology courses in the program, MCC offers a wide range of preparatory courses. Please consult with a computer science/technology faculty advisor.

Learning Outcomes
Upon successful completion of all Computer Engineering Technology degree program requirements, graduates will

1. Demonstrate the ability to understand a problem and develop logically structured solutions through the use of flowcharts, pseudocode and C++ code.
2. Differentiate and understand the role and function of various current and emerging technologies, including, but not limited to, computer hardware, networking, programming, and database and Internet technologies.
3. Describe basic computer organization and the relationship between hardware components and the operating system.
4. Differentiate and apply the basic technologies used in local- and wide-area networks. Demonstrate competency in installing, repairing, servicing, troubleshooting and upgrading computers and peripheral equipment from the PC technician’s point of view.
5. Demonstrate an understanding of the fundamentals of computer electronics from circuit analysis, including analog and digital electronics.
6. Demonstrate a working knowledge of the internal structure of digital computers.
7. Discuss and explore the relationship between the CPU, assembly language and machine language.
8. Discuss and explore the relationship between ROM, the instruction set, system clock and the internal addressing schemes.
9. Discuss and describe the data path.

In addition, the graduate will complete the comprehensive learning outcomes identified with the General Education Core.
Computer Engineering Technology Requirements

- ENG* 101: Composition 3 Credits (Gen Ed - Mode 2)
- MAT* 185: Trigonometric Functions 3 Credits (Gen Ed - Mode 4)
- EET* 108: AC/DC Circuit Analysis 4 Credits
- CST* 141: Computer Hardware 4 Credits
- EGR* 230: C++ For Engineers 3 Credits

Subtotal: 17

- ENG* 202: Technical Writing 3 Credits
- MAT* 186: Precalculus 4 Credits
- EET* 132: Electronics 4 Credits
- CST* 123: Computer Operating Systems 4 Credits
- COM* 173: Public Speaking 3 Credits (Gen Ed - Mode 3)

Subtotal: 18

- PHY* 121: General Physics I 4 Credits (Gen Ed - Mode 5)
- EET* 252: Digital Electronics 4 Credits
- Choose one course from Gen Ed - Mode 1 3 Credits
- PSY* 247: Industrial and Organizational Psychology 3 Credits (Gen Ed - Mode 6)

Subtotal: 14

- PHY* 122: General Physics II 4 Credits (Gen Ed - Mode 5)
- CSC* 287: Organization and Architecture 3 Credits
- CST* 131: Networking Theory & Application 4 Credits
- CSC* 286: Microprocessor Assembly language 4 Credits

Subtotal: 15

Total Credits Required: 64
Computer Game Design, A.S.

Program Design

The purpose of the Computer Game Design program is to provide students who are interested in a career in this industry comprehensive instruction in all aspects of computer game design, programming and production. The specific program objectives include:

- To provide instruction in all production aspects of game design and production including animation, sound design, game level design, 3D modeling, and computer graphics.
- To connect the media creation aspects of game design with the computer science programming necessary to produce functioning gameplay.
- To integrate creative thinking and technical skills in the development of original gaming concepts.
- To offer an overview of the games industry including tracking industry trends, preparation of production proposals and budgets, and the development and responsibilities of production teams.

The program is structured to equip students with a sound foundation in technical skills, design concepts, aesthetics, terminology and vocabulary, and to provide an awareness of the application of creative and critical thinking in the use of technical knowledge. A strong emphasis has been placed on the use of the computer as a production and compositing tool.

Learning Outcomes

Upon successful completion of all program requirements, graduates of the Computer Game Design program will:

- Meet educational standards for entry-level and advanced level employment in the area of game design and development.
- Demonstrate an understanding of the production pipeline for game development (concept, storytelling, character development, level design, programming decisions, network distribution, etc.).
- Integrate creative/artistic skills (drawing, animation, storytelling, level design, etc.) with the computer science programming skills necessary for the development of interactive media.
- Demonstrate the software skills necessary for game development and for potential employment in the game development field.

In addition, the graduate will complete the comprehensive learning outcomes identified with the General Education Core.
Computer Game Design Requirements

- ENG* 101: Composition 3 Credits (Gen Ed - Mode 2)
- Choose one History elective 3 credits
- DGA* 109: Introduction to Computer Games 3 Credits
- DGA* 111: Introduction to Computer Graphics 3 Credits
- CSC* 125: Programming Logic and Design with C++ 3 Credits
  **Subtotal 15 credits**

- ENG* 110: Introduction to Literature 3 Credits (Gen Ed - Mode 3)
- Choose one from Gen Ed - Mode 4 3 credits
- DGA* 212: Advanced Computer Graphics 3 Credits
- DGA* 261: Computer Animation 3 Credits
- Choose one from Gen Ed - Mode 6 3 credits
  **Subtotal 15 credits**

- DGA* 271: 3-D Computer Modeling I 3 Credits
- DGA* 224: Digital Painting 3 Credits
- DGA* 274: Game Design with Flash 3 Credits
- DGA* 265: Character Animation 3 Credits
- Choose one from Gen Ed - Mode 5 3-4 credits
- Choose one from Gen Ed - Mode 3 3-4 credits
  **Subtotal 18-19 credits**

- CSC* 247: Game Development in C++ 3 Credits
- DGA* 276: 3D Animation and Rigging 3 Credits
- DGA* 275: Game Level Design 3 Credits
- DGA* 240: Web Page Design 3 Credits
- Choose one studio (computer) elective 3 credits
  **Subtotal 15 credits**

**Total Credits 63-65**

**Note:**
History elective: choose from HIS* 101: Western Civilization I, HIS* 102: Western Civilization II, HIS* 121: World Civilization I, HIS* 122: World Civilization II, HIS* 201: United States History I, or HIS* 202: United States History II
Recommended Mode 5 Science: PHY* 110: Introductory Physics
Studio (computer) electives:
- DGA* 214: Advanced Computer Graphics II 3 Credits
- DGA* 262: Computer Animation II 3 Credits
- DGA* 287: Digital Short Films 3 Credits
- ART* 250: Digital Photography 3 Credits
- ART* 281: Digital Photography II 3 Credits
- CSC* 226: Object-Oriented Programming with Java 4 Credits
Computer Network Technology, A.S.

Program Design
The Computer Network Technology associate degree program provides students with a broad background in the underlying disciplines of computer networking technology including an understanding of computer networking concepts and technologies, an understanding of the administration of networked client-server computer operating systems, an understanding of the fundamentals of computer programming, and an understanding of the fundamentals of computer architecture and organization.

Students will also acquire a comprehensive educational background in mathematics, physics and general education. This program will enhance and develop the student’s critical thinking, problem analysis and resolution skills.

The Computer Network Technology A.S. degree program can serve as either a terminal degree which prepares students for positions in the computer networking and system administration professions or as a transfer degree to baccalaureate institutions with degree programs in computer networking and system administration. Students planning to transfer to baccalaureate institutions should consult with an advisor regarding the requirements of these institutions and transferability of courses.

The Computer Network Technology degree will also begin to prepare students for the CompTIA, Microsoft and CCNA certification exams.

Curriculum
Students may enroll in this program full- or part-time. Courses are offered during daytime or evening hours. While there is no required sequence for most courses in the degree, the following five courses have prerequisites which require them to be taken in the following order:

1st Semester  CST*131 Networking Theory & Application
2nd Semester  CST*237 SysAdmin I - Client/Server
3rd Semester  CST*238 SysAdmin II - Client/Server and CST*132 Networking Infrastructure
4th Semester  CST*277 Network Security Implementation

Also, if students elect to take CST*205 Project Management, it is recommended that students take it during their last semester.

For students not prepared for the required mathematics or computer technology courses in the program, MCC offers a wide range of preparatory courses. Please consult with a computer science/technology faculty advisor.

Learning Outcomes
Upon successful completion of all Computer Network Technology degree program requirements, graduates will

1. Demonstrate the ability to understand a problem and develop logically structured solutions through the use of flowcharts, pseudocode, Python and C++ code.
2. Differentiate and understand the role and function of various current and emerging technologies, including, but not limited to, computer hardware, networking, programming, and database and Internet technologies.
3. Describe basic computer organization and the relationship between hardware components and the operating system.
4. Describe the essential operating system components and the operating services.
5. Differentiate and apply the basic technologies used in local- and wide-area networks.
6. Demonstrate and implement advanced networking infrastructure concepts.
7. Demonstrate the use of appropriate tools to administer and troubleshoot server and client computers on a network.
8. Demonstrate skills in installation, configuration, maintenance, troubleshooting and upgrade of computer operating systems at both the workstation and server levels.
9. Demonstrate competency in installing, repairing, servicing, troubleshooting and upgrading computers and peripheral equipment from the PC technician’s point of view.

In addition, the graduate will complete the comprehensive learning outcomes identified with the General Education Core.
Computer Network Technology Requirements

- CST* 131: Networking Theory & Application 4 Credits
- CSC* 124: Programming Logic and Design with Python 3 Credits
- MAT* 172: College Algebra 3 Credits (Gen Ed - Mode 4)
- ENG* 101: Composition 3 Credits (Gen Ed - Mode 2)
  Subtotal: 13

- CST* 237: SysAdmin I - Client/Server 4 Credits
- CST* 141: Computer Hardware 4 Credits
- MAT* 165: Elementary Statistics with Computer Applications 4 Credits
- CST* 123: Computer Operating Systems 4 Credits
  Subtotal: 16

- CST* 238: SysAdmin II - Client/Server 4 Credits
- CST* 132: Networking Infrastructure 3 Credits
- (Gen Ed Mode 5 - Physics ) 4 Credits
- CST* 201: Introduction to MIS 3 Credits
- COM* 173: Public Speaking 3 Credits (Gen Ed - Mode 3)
  Subtotal: 17

- CST* 277: Network Security Implementation 4 Credits
- Elective - Technical Elective 3-4 Credits ‡
- PSY* 247: Industrial and Organizational Psychology 3 Credits or any (Gen Ed - Mode 6)

- ENG* 202: Technical Writing 3 Credits or
- CST* 205: Project Management 4 Credits

- Choose one course from Gen Ed - Mode 1 3 credits
  Subtotal: 16-18

Total Credits Required: 62-64

Note:

‡ Technical Electives:

- CAD* 110: Introduction to CAD 3 Credits
- CSC* 125: Programming Logic and Design with C++ 3 Credits
- CSC* 215: Object-Oriented Programming with C++ 4 Credits
- CST* 150: Web Design & Development I 3 Credits
- CST* 205: Project Management 4 Credits
- ENG* 202: Technical Writing 3 Credits
- CSC* 295: Cooperative Education/Work Experience 3 Credits
Computer Programming Technology, A.S.

Program Design
The Computer Programming Technology associate degree program provides students with a broad background and specific skills in the disciplines of computer programming technology including: the fundamentals of, and specific skills in, computer programming; the structured logic and design of computer programs; the fundamentals of algorithm design and analysis of data structures; broad experience in problem solving using computers; the basics of computer organization and architecture; an understanding of the basics of computer operating systems; an understanding of basic computer networking technology; and an emphasis on current, state-of-the-art, object-oriented computer programming languages.

Students will also acquire a comprehensive educational background in mathematics, physics and general education. In addition to acquired skills and knowledge in the field of computer programming technology, this program will enhance and develop the student’s critical thinking, problem analysis and resolution skills.

The Computer Programming Technology A.S. degree program prepares students for transfer to institutions with bachelor degree programs in computer science or other related computer science/technology programs, or for entry into computer-based industry positions and further industry-based training. Students planning to transfer to baccalaureate institutions should consult with an advisor regarding the requirements of these institutions and transferability of courses.

Curriculum
Students may enroll in this program full- or part-time. Courses are offered during daytime or evening hours. For students not prepared for the required mathematics or computer technology courses in the program, MCC offers a wide range of preparatory courses. Please consult with a computer technology faculty advisor.

Learning Outcomes
Upon successful completion of all Computer Programming Technology degree program requirements, graduates will

1. Demonstrate the ability to understand a problem and develop logically structured solutions through the use of flowcharts, pseudocode and C++ code.

2. Differentiate and understand the role and function of various current and emerging technologies, including, but not limited to, computer hardware, networking, programming, and database and Internet technologies.

3. Describe basic computer organization and the relationship between hardware components and the operating system.

4. Describe the essential operating system components and the operating services.

5. Identify and apply the major concepts and language requirements to design, code, execute and debug programs in the required programming languages.

6. Demonstrate an understanding of proper database design. Apply System Development Life Cycle concepts to plan, design, develop and code a database.

In addition, the graduate will complete the comprehensive learning outcomes identified with the General Education Core.
Computer Programming Technology Requirements

- CSC* 125: Programming Logic and Design with C++ 3 Credits
- CST* 201: Introduction to MIS 3 Credits
- Choose one course from Gen Ed - Mode 1 3 Credits
- MAT* 186: Precalculus 4 Credits (Gen Ed - Mode 4)
- ENG* 101: Composition 3 Credits (Gen Ed - Mode 2)

Subtotal: 16

- CST* 131: Networking Theory & Application 4 Credits
- CSC* 215: Object-Oriented Programming with C++ 4 Credits
- MAT* 165: Elementary Statistics with Computer Applications 4 Credits
- PSY* 247: Industrial and Organizational Psychology 3 Credits or any Gen Ed - Mode 6

Subtotal: 15

- CST* 150: Web Design & Development I 3 Credits
- CST* 250: Web Design and Development II 3 Credits
- CST* 205: Project Management 4 Credits
- CST* 123: Computer Operating Systems 4 Credits
- Gen Ed Mode 5 - Physics 4 Credits

Subtotal: 17

- COM* 173: Public Speaking 3 Credits (Gen Ed - Mode 3)
- CSC* 205: Visual Basic .NET I 3 Credits
- CSC* 241: Data Structures and Algorithms 4 Credits
- CST* 258: Internet Programming 4 Credits
- CST* 230: Database Concepts with Web Application 3 Credits

Subtotal: 18

Total Credits Required: 66
Computer Science, A.S.

Program Design
The Computer Science associate degree program provides students with a broad background in the underlying disciplines of computer science including: the fundamentals of computer programming; the fundamentals of algorithm design and analysis of data structures; broad experience in problem solving with computers; the basics of computer architecture, organization and assembly language; an understanding of the basics of computer operating systems; and an understanding of computer networking concepts and technologies including the fundamentals of network design, installation, maintenance and administration. Students will also acquire a comprehensive educational background in mathematics, physics and general education. In addition to acquired skills and knowledge in the field of computer science, this program will enhance and develop the student’s critical thinking, problem analysis and resolution skills. The Computer Science A.S. degree program prepares students for transfer to institutions with bachelor’s degree programs in computer science or other related computer science/technology programs, or for entry into computer-based industry positions and further industry-based training. Students planning to transfer to baccalaureate institutions should consult with an advisor regarding the requirements of these institutions and transferability of courses.

Curriculum
Students may enroll in this program full- or part-time. Courses are offered during daytime and/or evening hours. Some courses are not offered every semester. Consult with a faculty advisor to work out a schedule. For students not prepared for the required mathematics and computer science courses in the program, MCC offers a wide range of preparatory courses. Please consult with a computer science faculty advisor.

Learning Outcomes
Upon successful completion of all requirements of the Computer Science A.S. degree program, graduates will
1. Demonstrate the ability to understand a problem and develop logically structured solutions through the use of flowcharts, pseudocode and C++ code.
2. Differentiate and understand the role and function of various current and emerging technologies, including, but not limited to, computer hardware, networking, programming, and database and Internet technologies.
3. Describe basic computer organization and the relationship between hardware components and the operating system.
4. Describe the essential operating system components and the operating services.
5. Demonstrate an understanding of the relationships between efficient algorithms and data structures and how efficiencies can be measured.
6. Use knowledge of algorithm design and data structures for the solution of problems, including efficient sorting, searching and graph manipulation.
7. Demonstrate a working knowledge of the internal structure of the digital computer.
8. Identify and apply the major concepts and language requirements to design, code, execute and debug programs in the required programming languages.
9. Differentiate and apply the basic technologies used in local- and wide-area networks.
In addition, the graduate will complete the comprehensive learning outcomes identified with the General Education Core.
Computer Science Requirements

- ENG* 101: Composition 3 Credits (Gen Ed - Mode 2)
- Choose one course from Gen Ed - Mode 1 3 Credits
- MAT* 254: Calculus I 4 Credits (Gen Ed - Mode 4) (formerly MAT* 250)‡
- COM* 173: Public Speaking 3 Credits (Gen Ed - Mode 3)
- CSC* 125: Programming Logic and Design with C++ 3 Credits

Subtotal: 16

- CSC* 215: Object-Oriented Programming with C++ 4 Credits
- CST* 131: Networking Theory & Application 4 Credits
- MAT* 256: Calculus II 4 Credits
- ENG* 110: Introduction to Literature 3 Credits (Gen Ed - Mode 3)

Subtotal: 15

- EET* 252: Digital Electronics 4 Credits
- Choose one course from Gen Ed - Mode 6 3 Credits
- CSC* 287: Organization and Architecture 3 Credits
- CST* 123: Computer Operating Systems 4 Credits
- PHY* 221: Calculus-Based Physics I 4 Credits (Gen Ed - Mode 5)

Subtotal: 18

- MAT* 272: Linear Algebra 3 Credits or
- MAT* 285: Differential Equations 4 Credits or
- MAT* 268: Calculus III: Multivariable 4 Credits

- CSC* 241: Data Structures and Algorithms 4 Credits
- CSC* 286: Microprocessor Assembly language 4 Credits
- PHY* 222: Calculus-Based Physics II 4 Credits

Subtotal: 15-16

Total Credits Required: 64-65

Note:

‡ Students who receive credit for MAT* 250 have fulfilled the MAT* 254 requirement.
Computer Technology, A.S.

Program Design
The Computer Technology associate degree program provides students with a broad background in the diverse fields of computer technology and the opportunity to obtain both broad and in-depth knowledge of the theory, design, installation, maintenance, management and application of modern computer hardware and software including: computer programming skills; Internet and Web page design skills; fundamentals of computer operating systems; basic computer architecture; computer hardware and software installation, upgrading, configuration and maintenance; fundamentals of computer networks; and computer database concepts and applications.

Students will also acquire a comprehensive educational background in mathematics, physics and general education. In addition to acquired skills and knowledge in the field of computer technology, this program will enhance and develop the student’s critical thinking, problem analysis and resolution skills.

The Computer Technology A.S. degree program prepares students for transfer to institutions with bachelor's degree programs in computer science or other related computer science/technology programs, or for entry into computer-based industry positions and further industry-based training. Students planning to transfer to baccalaureate institutions should consult with an advisor regarding the requirements of these institutions and transferability of courses.

Depending on choice of electives, the Computer Technology degree will also begin to prepare students for the CompTIA, Microsoft and CCNA certification exams.

Curriculum
Students may enroll in this program full- or part-time. Courses are offered during daytime and/or evening hours. For students not prepared for the required mathematics or computer technology courses in the program, MCC offers a wide range of preparatory courses. Please consult with a computer technology faculty advisor.

Learning Outcomes
Upon successful completion of all requirements of the Computer Technology A.S. degree program, graduates will
1. Demonstrate the ability to understand a problem and develop logically structured solutions through the use of flowcharts, pseudocode and C++ code.
2. Differentiate and understand the role and function of various current and emerging technologies, including, but not limited to, computer hardware, networking, programming, and database and Internet technologies.
3. Describe basic computer organization and the relationship between hardware components and the operating system.
4. Describe the essential operating system components and the operating services.
5. Identify and apply the major concepts and language requirements to design, code, execute and debug programs in the required programming languages.
6. Differentiate and apply the basic technologies used in local- and wide-area networks.
7. Demonstrate competency in installing, repairing, servicing, troubleshooting and upgrading computers and peripheral equipment from the PC technician’s point of view.

In addition, the graduate will complete the comprehensive learning outcomes identified with the General Education Core.
Computer Technology Requirements

- CST* 131: Networking Theory & Application 4 Credits
- ENG* 101: Composition 3 Credits (Gen Ed - Mode 2)
- COM* 173: Public Speaking 3 Credits (Gen Ed - Mode 3)
- CSC* 125: Programming Logic and Design with C++ 3 Credits
  Subtotal: 13

- CSC* 215: Object-Oriented Programming with C++ 4 Credits
- MAT* 172: College Algebra 3 Credits (Gen Ed - Mode 4)
- CST* 201: Introduction to MIS 3 Credits
- Choose one course from Gen Ed - Mode 1 3 Credits
- ENG* 202: Technical Writing 3 Credits
  Subtotal: 16

- CST* 150: Web Design & Development I 3 Credits
- CST* 141: Computer Hardware 4 Credits
- Elective - Technical Elective (choose 1) 3-4 Credits‡
- MAT* 165: Elementary Statistics with Computer Applications 4 Credits
- PSY* 247: Industrial and Organizational Psychology 3 Credits or any (Gen Ed - Mode 6)
  Subtotal: 17-18

- CST* 230: Database Concepts with Web Application 3 Credits
- Elective - Technical Elective (choose 1) 3-4 Credits‡
- CST* 205: Project Management 4 Credits
- Gen Ed Mode 5 - Physics 4 Credits
  Subtotal: 14-15

Total Credits Required: 62-64
‡ Technical Electives Lists:
  Programming Interest:
  - CSC* 205: Visual Basic .NET I 3 Credits
  - CSC* 206: Visual Basic .NET II 3 Credits
  - CSC* 226: Object-Oriented Programming with Java 4 Credits
  - CSC* 124: Programming Logic and Design with Python 3 Credits
  Operating Systems Interest:
  - CST* 237: SysAdmin I - Client/Server 4 Credits
  - CST* 238: SysAdmin II - Client/Server 4 Credits
  - CST* 123: Computer Operating Systems 4 Credits
  Web Interest:
  - CST* 250: Web Design and Development II 3 Credits
  - CST* 258: Internet Programming 4 Credits
  Networking Interest:
  - CST* 132: Networking Infrastructure 3 Credits
  - CST* 277: Network Security Implementation 4 Credits
  - CAD* 110: Introduction to CAD 3 Credits
  - CSC* 295: Cooperative Education/Work Experience 3 Credits
Criminal Justice, A.S.

Program Design

The Criminal Justice associate degree program offers students the opportunity to prepare for work within the various fields of criminal justice in both the public forum and private agencies. The curriculum consists of a strong liberal arts academic base supported by social science electives and criminal justice core courses. The latter are enhanced by electives in criminal justice, corrections and security services. The prescribed program also provides for free electives that may benefit the student’s educational awareness and career choice. Courses are available during the day and evening. The program has strong relationships with many local and state agencies, colleges and universities. Students have been successful in transferring all program courses. A strong element of the program is a cadre of local professionals who supplement the regular faculty, serving as guest lecturers, adjunct faculty and intern sponsors. Credit for criminal justice core courses and electives may be obtained by students who submit police and criminal justice-related training and work experience for evaluation.

Learning Outcomes

Upon successful completion of all Criminal Justice degree program requirements, graduates will
1. Have a general understanding and appreciation of the role of the criminal justice system at local, state and federal levels.
2. Demonstrate knowledge of appropriate codes of professional ethics and the capability to critically and reflectively engage ethical issues in criminal justice, particularly questions of social responsibility and professional decision-making.
3. Demonstrate knowledge of theories, principles, judicial and correctional processes, legal institutions, and methods of law enforcement.
4. Have a sound basic education in criminal justice for graduates who choose to pursue a bachelor's degree.

In addition, the graduate will complete the comprehensive learning outcomes identified with the General Education Core.
Criminal Justice Requirements

- CJS* 101: Introduction to Criminal Justice 3 Credits
- Choose one course from Gen Ed - Mode 3 3 Credits
- Choose one course from Gen Ed - Mode 4 3 Credits
- ENG* 101: Composition 3 Credits (Gen Ed - Mode 2)
- POL* 111: American Government 3 Credits (Gen Ed - Mode 6) or
- POL* 112: State and Local Government 3 Credits (Gen Ed - Mode 6)
  **Subtotal: 15**

- CJS* 105: Introduction to Law Enforcement 3 Credits and
- CJS* 120: Police and the Community 3 Credits
  or
- CJS* 102: Introduction to Corrections 3 Credits and
- CJS* 240: Correctional Administration 3 Credits
  or
- CJS* 225: Forensic Science I 3 Credits and
- CJS* 226: Forensic Science II 3 Credits
  or
- CJS* 106: Introduction to Homeland Security 3 Credits and
- CJS* 160: Introduction to Emergency Management 3 Credits
- HIS* 101: Western Civilization I 3 Credits (Gen Ed - Mode 6) or
- HIS* 102: Western Civilization II 3 Credits (Gen Ed - Mode 6) or
- HIS* 201: United States History I 3 Credits (Gen Ed - Mode 6) or
- HIS* 202: United States History II 3 Credits (Gen Ed - Mode 6)
  Choose one course from Gen Ed - Mode 5 3 Credits
  Choose any ENG* above 101 3 Credits
  **Subtotal: 15**

- CJS* 289: Careers in Criminal Justice 3 Credits or
- CJS* 293: CJ Cooperative Education/Work Experience 3 Credits
- CJS* 211: Criminal Law I 3 Credits
- CJS* 220: Criminal Investigation 3 Credits
- Elective criminal justice 3 Credits
  Choose any course 3 Credits
  **Subtotal: 15**

- CJS* 213: Evidence & Courtroom Procedure 3 Credits
- POL* 212: Constitutional Law and Civil Rights 3 Credits
- CJS* 212: Criminal Law II 3 Credits
- Elective criminal justice 3 Credits
  Choose one course from Gen Ed - Mode 1 3 Credits
  **Subtotal: 15**

**Total Credits Required: 60**

*Note: * ENG* 200 or ENG* 202 recommended.*
Culinary Arts, A.S.

Program Design

The Culinary Arts associate degree program will give students the knowledge necessary to be successful in a restaurant or hotel kitchen, or the kitchens of other food services for business and industry dining, health-care facilities and schools. It will also give students the tools and skills to start work for businesses that supply foods at catered events, meeting and conventions centers, and supermarkets.

The Culinary Arts program is accredited by the American Culinary Federation Educational Institute. In addition to classroom and laboratory study, students will participate in an individually-planned, 300-hour cooperative work experience program, earning credit toward graduation while employed.

Students are required to purchase their own official kitchen and table service uniforms, as well as culinary tools and cutlery.

In addition to this degree, students may earn a second associate’s degree in Foodservice Management or Hotel-Tourism Management by taking additional credit hours. Candidates interested in earning double degrees should see a counselor or a hospitality management faculty member.

Curriculum

Students may enroll in this program full- or part-time, day or evening. This program has an active student club that provides a variety of activities to supplement the formal curriculum.

Learning Outcomes

Upon successful completion of all Culinary Arts degree program requirements, graduates will:

1. Analyze theory and techniques of baking and pastry arts.
2. Analyze theory and techniques of food preparation and presentation.
3. Prepare basic foods in quantity, including various regional foods.
4. Prepare ethnic cuisine in quantity.
5. Setup and operate the “front of the house.”
7. Decorate layer cakes with molded and sculpted decorations.
8. Create artisan breads.
9. Create and cater events.
10. Summarize basic principles and concepts of the hospitality industry.
11. Summarize managerial techniques and human resources management practice.
12. Demonstrate appropriate problem-solving techniques in addressing management problems.
13. Differentiate styles of marketing, sales analysis and planning for the hospitality industry.
14. Prepare menus incorporating costs, acquisition and inventory controls.
15. Transfer acquired knowledge to the world of work.

In addition, the graduate will complete the comprehensive learning outcomes identified with the General Education Core.
Culinary Arts Degree Requirements

- HSP* 108: Sanitation and Safety 3 Credits
- HSP* 101: Principles of Food Preparation 3 Credits
- HSP* 100: Introduction to the Hospitality Industry 3 Credits
- HSP* 103: Principles of Baking I 3 Credits
- ENG* 101: Composition 3 Credits (Gen Ed - Mode 2)
  Subtotal: 15

- HSP* 112: Advanced Food Preparation 4 Credits
- HSP* 215: Principles of Baking II 3 Credits
- BIO* 111: Introduction to Nutrition 3 Credits (Gen Ed - Mode 5)
- Choose one course from Gen Ed - Mode 3 3 Credits
- Choose one course from Gen Ed - Mode 4 3 Credits
  Subtotal: 16

- HSP* 216: Artisan Bread 3 Credits or
- HSP* 290: Classical Cuisine 3 Credits

- HSP* 211: Food and Beverage Cost Control 3 Credits
- HSP* 201: International Foods 4 Credits
- HSP* 107: Icing Artistry I 3 Credits
- Choose one course from Gen Ed - Mode 6 3 Credits
  Subtotal: 16

- HSP* 225: Principles of Baking III 3 Credits or
- HSP* 207: Icing Artistry II 3 Credits

- HSP* 296: Cooperative Education/Work Experience 3 Credits
- HSP* 210: Buffet Catering 4 Credits
- Choose one course from Gen Ed - Mode 1 3 Credits
- Choose one course from any Gen Ed Mode 3 Credits
  Subtotal: 15

Total Credits Required: 63

Dual Degree in Foodservice Management

To complete a dual degree in Foodservice Management, students should take the following courses:
- ACC* 115: Financial Accounting 4 Credits
- GEO* 111: World Regional Geography 3 Credits
- HSP* 117: Beverage Management 3 Credits
- HSP* 233: Hospitality Human Resource Management 3 Credits
- HSP* 237: Hospitality Marketing 3 Credits
- HSP* 238: Relationship Marketing 3 Credits
Disability Specialist, A.S.

Program Design
The Disability Specialist associate degree program prepares students to work in a wide range of positions in private and public educational and human service agencies. Through individual consultation, each student will pursue a course of study with an emphasis upon the unique vocational goals he or she wishes to achieve. Every effort will be made to provide specific skill instruction; however, the focus of the curriculum is on building a strong knowledge base coupled with a positive value base that will prepare each student to assist children and adults with disabilities toward the goals of full community inclusion and participation, and the attainment of their potential.
This program builds upon the Americans with Disabilities Act of 1990, a landmark piece of legislation that provides basic civil rights to millions of people with disabilities in America. Students will become an important part of this dynamic movement. Since most work settings are in the schools, workplaces, community associations, apartments and homes in the community, an understanding of “community-building” and “individual capacity-building” techniques and procedures is stressed. Creativity, sensitivity and a capacity to concentrate on the abilities of the whole person are essential characteristics of a disability specialist.

Program Philosophy - People with disabilities are an integral part of the community and should receive necessary integrated community-based support.

Mission Statement
The mission of the Disability Specialist Program is to prepare students for careers in supporting children and adults with disabilities in the community by:
1. recognizing and enhancing the dignity, respect and contribution of every child and adult with a disability;
2. providing information on job opportunities in the disability field to encourage the recruitment of young and continuing education students;
3. emphasizing, throughout the curriculum, community inclusion of all people with disabilities;
4. creating opportunities for interaction among the students, faculty, staff and members of the community with and without disabilities;
5. promoting the value of a Disability Specialist degree or certificate in the job market;
6. introducing students to assistive technology and other innovations in the continuously evolving field of supporting people with disabilities in the community.

Curriculum Because of the flexible nature of this program, students may select a full- or part-time plan of study for an associate degree or a certificate option.

Learning Outcomes
Upon successful completion of all Disability Specialist degree program requirements, graduates will:
1. Define and discuss basic definitions, causes, psychological characteristics and educational approaches relevant to children with disabilities.
2. Discuss how children and adults with disabilities have unique abilities rather than limitations.
3. Identify current trends and issues, and define the impact of current national and state laws and policies, affecting people with disabilities and their families.
5. Define ethical standards in the disability field and demonstrate confidentiality in written and oral assignments.

In addition, the graduate will complete the comprehensive learning outcomes identified with the General Education Core.
Disability Specialist Requirements

- ENG* 101: Composition 3 Credits (Gen Ed - Mode 2)
- HSE* 101: Introduction to Human Services 3 Credits
- PSY* 111: General Psychology I 3 Credits (Gen Ed - Mode 6)
- Elective any course 3 Credits
- PSY* 163: Children with Disabilities 3 Credits

Subtotal: 15

- Choose one course from Gen Ed - Mode 3 3 Credits
- HSE* 251: Work with Individuals and Families 3 Credits
- Choose one course from Gen Ed - Mode 6 3 Credits
- PSY* 173: Adults with Disabilities 3 Credits
- Choose one course from Gen Ed - Mode 5 3 Credits

Subtotal: 15-16

- Elective any course 3 Credits
- HSE* 210: Group & Interpersonal Relations 3 Credits
- POL* 111: American Government 3 Credits or
- POL* 112: State and Local Government 3 Credits
- PSY* 183: Learning Process and Disabilities 3 Credits
- Choose one course from Gen Ed - Mode 1 3 Credits

Subtotal: 15

- HSE* 241: Human Services Agencies and Organizations 3 Credits
- PSY* 164: Assistive Technology for Students with Disabilities (K-12) 1 Credits
- PSY* 174: Assistive Technology for Adults in the Workplace, Home and Community. 1 Credits
- SSC* 294: Cooperative Education/Work Experience 3 Credits
- PSY* 193: Issues/Trends in Disabilities 3 Credits
- Choose one course from Gen Ed - Mode 4 3 Credits ‡‡
- HSE* 294: Disability Specialist Seminar 1 Credits

Subtotal: 15

Total Credits Required: 60-61

Note:
† Students planning to transfer should take a Mode 5 course with a lab.
‡‡ Students planning to transfer should take MAT* 165.
Drug & Alcohol Recovery Counselor, A.S.

Program Design
The Drug and Alcohol Recovery Counselor (DARC) associate degree program provides education and training for persons seeking employment or job advancement in the addiction profession; others transfer to upper level colleges to complete bachelor’s or graduate degrees in the field of addiction counseling or other transfer opportunities. Students receive education and training in the professional techniques of counseling with a disciplined background in the environmental and psychological causes and effects of alcohol and other substance use disorders. The DARC program is designed to meet the academic requirement for the State of Connecticut and the CT Certification Board’s requirements for certification as an alcohol and drug/addiction counselor. This program is designed to provide the student with the most up-to-date knowledge in the field of addictions.

First-year specialty courses are open to any student wishing to enroll, e.g. DAR* 101, DAR* 111, DAR* 112, DAR* 158.

DARC Internship Admission Process
Registration for the DARC internship courses (DAR* 251 & DAR* 252) and placement into a DARC internship site is based on the submission of an official application packet, an interview/screening process, and the satisfactory completion of DAR* 101, DAR* 111, DAR* 112, DAR* 158 and DAR* 213 with a grade of C or better. Those students seeking admission into the DARC internship must meet with the DARC program coordinator. DARC internships begin each fall semester and the internship application packet must be submitted to the DARC program coordinator at the beginning of the previous spring semester. Interviews/screenings take place each Spring for the following Fall semester.

Curriculum
The program consists of 27 semester hours of specialty courses and 33 semester hours of general education credits.

Students may enroll full- or part-time.

Learning Outcomes
Upon successful completion of all Drug and Alcohol Recovery Counselor degree program requirements, graduates will:

1. Understand addiction and a variety of models and theories of addiction and other problems related to addictions. Be able to describe the behavioral, psychological, physical health and social effects of psychoactive substances on the user and significant others.

2. Understand treatment, describe the philosophies, practices, policies, and outcomes of the most generally accepted and scientifically supported models of treatment, recovery, relapse prevention, and continuing care for addiction and other substance-related problems. Recognize the importance of family, social networks, and community systems in the treatment and recovery process.

3. Apply knowledge and understand the established diagnostic criteria for substance use disorders and describe treatment modalities and placement criteria within the continuum of care and provide treatment services appropriate to the personal and cultural identity and language of the client.

4. Demonstrate professionalism and understand the importance of self-awareness in one’s personal, professional and cultural life. Understand the addiction professional’s obligations to adhere to ethical and behavioral standards of conduct in the helping relationship.

In addition, the graduate will complete the comprehensive learning outcomes identified with the General Education Core.
Drug & Alcohol Recovery Counselor Requirements

- DAR* 101: Public Health Issues Abuse and Addiction 3 Credits
- DAR* 111: Addiction Counseling 3 Credits
- ENG* 101: Composition 3 Credits
- PSY* 111: General Psychology I 3 Credits
- Choose one course from Gen Ed - Mode 5 3-4 Credits

Subtotal: 15-16

- DAR* 112: Group Counseling Theory and Techniques 3 Credits
- DAR* 158: Biology of Addiction 3 Credits
- DAR* 213: Addiction Counseling II 3 Credits
- Choose one course from Gen Ed - Mode 3 3 Credits
- Choose one course from Gen Ed - Mode 6 3 Credits

Subtotal: 15

- DAR* 251: Counseling Internship I 6 Credits
- PSY* 245: Abnormal Psychology 3 Credits
- Choose one course from Gen Ed - Mode 1 3 Credits
- HSE* 134: Introduction to the Mental Health System 3 Credits

Subtotal: 15

- DAR* 252: Counseling Internship II 6 Credits
- Choose one course from Gen Ed - Mode 4 3 Credits
- Choose any course 3 Credits
- PSY* 107: Pathways to Personal Growth 3 Credits

Subtotal: 15

Total Credits Required: 60-61

Note:
‡ Courses open only to students formally accepted into this program.
Early Childhood Education, A.S.

Program Design

The Early Childhood Education associate degree program is designed to prepare qualified students to become teachers of young children.

Curriculum

The Early Childhood Education program curriculum focuses on the developmental needs of young children from birth to five years of age, and emphasizes a practical approach to supporting and enhancing growth and development. Course work in theory and methods is enhanced by participation in the field experience segment of the program. The program is available to the student full- or part-time. Students who want to teach children in kindergarten, first, second or third grades should plan to transfer to the Early Childhood Education program at a baccalaureate institution after receiving this degree.

Learning Outcomes

Upon successful completion of all Early Childhood Education degree program requirements, graduates will

1. Support young children in early childhood programs using skills in observation, documentation, assessment, and application.

2. Plan, implement, and evaluate developmentally appropriate lesson/activity plans that foster children’s social, emotional, physical, and intellectual development and involve families.

3. Demonstrate effective teaching strategies in an early childhood program, based upon child development theory and family involvement principles, which include setting up the learning environment, letting children practice skills and ideas, interacting positively with children, colleagues, and families, and modeling behavior we want children to emulate.

4. Evaluate the quality of an early childhood program through curriculum activities, routines, and teacher and child engagement, the learning environment, teacher/child interaction, and family involvement.

In addition, the graduate will complete the comprehensive learning outcomes identified with the General Education Core.
Early Childhood Education Requirements

- ECE* 101: Introduction to Early Childhood Education 3 Credits
- ENG* 101: Composition 3 Credits (Gen Ed - Mode 2)
- MAT* 109: Quantitative Literacy 3 Credits (Gen Ed - Mode 4) or any higher level MAT* course.
- PSY* 111: General Psychology I 3 Credits (Gen Ed - Mode 6)
- GEO* 111: World Regional Geography 3 Credits (Gen Ed - Mode 6) or
- SOC* 101: Principles of Sociology 3 Credits (Gen Ed-Mode 6) or
- ANT* 105: Introduction to Cultural Anthropology. 3 Credits (Gen Ed - Mode 6)

Subtotal: 15

- ECE* 214: Observation Assessment and Participant Seminar 4 Credits
- PSY* 203: Child Development 3 Credits
- COM* 172: Interpersonal Communication 3 Credits or
- COM* 173: Public Speaking 3 Credits

Choose two of the following:
- ECE* 103: Creative Experiences/Children 3 Credits
- ECE* 222: Methods and Techniques in Early Childhood Education 3 Credits
- ECE* 241: Methods and Techniques for Infants and Toddlers 3 Credits

Subtotal: 16

- PSY* 163: Children with Disabilities 3 Credits
- ECE* 231: Early Language and Literacy Development 3 Credits
- ECE* 109: Science & Math for Children 3 Credits
- Choose one course from Gen Ed - Mode 1 3 credits
- Choose one course from Gen Ed - Mode 5 3-4 credits

Subtotal: 15-16

- ECE* 224: Advanced Early Childhood Curriculum 3 Credits
- Choose one course from Gen Ed - Mode 3 3 Credits
- Choose any course 3 Credits
- ECE* 295: Student Teaching Practicum 6 Credits

Subtotal: 15

Total Credits Required: 61-62
Engineering Science, A.S.

Program Design
The Engineering Science associate degree program prepares students for transfer to baccalaureate college and university programs in mechanical engineering, electrical engineering, civil engineering, chemical engineering, industrial engineering and engineering physics, as well as for immediate employment in engineering sciences and high technology fields. The program also offers students currently employed in technical positions in high technology industries the opportunity to retrain and upgrade their technical skills.

College of Technology - Engineering Pathway Program
The Engineering Science program, through the Connecticut College of Technology Pathways program, provides for direct entry into baccalaureate engineering programs at the University of Connecticut. Students may enter UConn engineering programs through the Engineering Science A.S. degree program at MCC and, upon successful completion of the program, continue on to UConn as third-year engineering students with a full two years of credit towards a bachelor's degree in engineering.

Curriculum
Students may enroll in this program full- or part-time. Courses are offered during daytime or evening hours. Preparation for the Engineering Science program includes a high school diploma or equivalent with one year of physics and three years of mathematics including Algebra I and Algebra II followed by advanced algebra or precalculus mathematics. For students not prepared for the required mathematics and English courses, MCC offers a wide range of developmental and preparatory courses.

Learning Outcomes
Upon successful completion of all Engineering Science degree program requirements, graduates will:

1. Be prepared to transfer into a bachelor of science degree program as a continuing student in the Engineering Pathway program. Provided the transferring schools' credit requirements are met, MCC students will transfer as juniors.
2. Demonstrate the ability to assist in research, development, design, production, testing and various other functions associated with engineering.
3. Demonstrate a good understanding of engineering principles/concepts.
4. Demonstrate a good understanding of mathematical concepts.
5. Demonstrate good working knowledge of state-of-the-art hardware and software in support of engineering design.
6. Demonstrate the ability to think through a problem in a logical manner.
7. Organize and carry through to conclusion the solution to a problem.
8. Demonstrate good communication skills.
9. Demonstrate teamwork skills.

In addition, the graduate will complete the comprehensive learning outcomes identified with the General Education Core.
Engineering Science Requirements

- ENG* 101: Composition 3 Credits (Gen Ed - Mode 2)
- EGR* 111: Introduction to Engineering 3 Credits
- MAT* 254: Calculus I 4 Credits (Gen Ed - Mode 4) (formerly MAT* 250) ‡
- CHE* 121: General Chemistry I 4 Credits
- HIS* 101: Western Civilization I 3 Credits (Gen Ed - Mode 6)

Subtotal: 17

- ENG* 110: Introduction to Literature 3 Credits (Gen Ed - Mode 3)
- MAT* 256: Calculus II 4 Credits
- Choose one course from Gen Ed - Mode 1 3 Credits
- PHY* 221: Calculus-Based Physics I 4 Credits
- EGR* 230: C++ For Engineers 3 Credits

Subtotal: 17

- PHY* 222: Calculus-Based Physics II 4 Credits
- EGR* 221: Introduction to Electric Circuit Analysis 4 Credits
- EGR* 211: Engineering Statics 3 Credits
- PHL* 111: Ethics 3 Credits
- MAT* 268: Calculus III: Multivariable 4 Credits

Subtotal: 18

- EGR* 212: Engineering Dynamics 3 Credits or
- EET* 252: Digital Electronics 4 Credits

- Choose one course from Gen Ed - Mode 6 3 Credits
- MAT* 285: Differential Equations 4 Credits

- CHE* 122: General Chemistry II 4 Credits or
- EGR* 214: Engineering Thermodynamics 3 Credits

Subtotal: 13-15

Total Credits Required: 65-67

Note:
‡ Students who receive credit for MAT* 250 have fulfilled the MAT* 254 requirement.
Entrepreneurship Option, Business Administration Career, A.S.

Program Design

The Entrepreneurship Option, Business Administration Career associate degree program prepares graduates with the tools necessary to develop and start their own business, grow their existing business or apply entrepreneurial skills to a corporate setting. Students also gain relevant knowledge to enhance their small business management skills. This option is also suitable for students who wish to earn a degree in business administration and may decide to open a small business in the future.

Although many courses in this program may be transferred, it is possible that they will only transfer as electives into a school of Business. Students planning to earn a bachelor's degree should register in the Accounting & Business Administration Transfer Program. In addition, they may earn a certificate in Entrepreneurship. We strongly recommend any student planning on transferring seek advising from Business faculty.

Curriculum

Students may attend full-time or part-time. Students must achieve at least a C or better in an accounting course to continue on to the next level. Note: All business and accounting courses, except for BBG* 108 (formerly QM 110), have prerequisites. All accounting courses numbered 100 or higher require students to be eligible for ENG* 101 and MAT* 095 or higher.

Learning Outcomes

Upon successful completion of all Entrepreneurship Option, Business Administration Career program requirements, graduates will:

1. Demonstrate relevant content knowledge in required core business disciplines (accounting, business law, management and organizational behavior, and marketing) and apply concepts in problem solving through identifying and evaluating alternative solutions and offering a well-supported conclusion.
2. Recognize proper business acumen and decorum in professional interactions; demonstrate appropriate interpersonal communication and presentation skills and demeanor; demonstrate the ability to use presentation and team interpersonal skills effectively in class presentations.
3. Recognize and respond thoughtfully to situations that present ethical dilemma, demonstrating the ability to identify ethical dilemmas and social responsibilities of business, an ability to confront ethical dilemmas, and apply ethical principles to business situations using concepts learned.
4. Apply concepts in core business disciplines and critical thinking skills to make sound financial decisions.
5. Demonstrate an understanding of the interrelationships between accounting and business courses.
6. Recognize the vital role small business plays in the global economy. Develop and apply decision-making skills to strategic business planning.

In addition, the graduate will complete the comprehensive learning outcomes identified with the General Education Core.
Entrepreneurship Option Requirements

- ACC* 115: Financial Accounting 4 Credits
- BBG* 101: Introduction to Business 3 Credits
- BBG* 234: Legal Environment of Business 3 Credits
- Choose one course from Gen Ed - Mode 4 3 Credits
- ENG* 101: Composition 3 Credits (Gen Ed - Mode 2)
  **Subtotal: 16**

- ACC* 118: Managerial Accounting 4 Credits
- BMG* 202: Principles of Management 3 Credits
- BMK* 201: Principles of Marketing 3 Credits
- MAT* 165: Elementary Statistics with Computer Applications 4 Credits or
- BBG* 108: Business & Consumer Finance 3 Credits (formerly QM 110) 
  
- COM* 173: Public Speaking 3 Credits
  **Subtotal: 16-17**

- BES* 218: Entrepreneurship 3 Credits
- ECN* 102: Principles of Microeconomics 3 Credits (Gen Ed - Mode 6)

- CST* 201: Introduction to MIS 3 Credits or
- BMK* 220: Sales 3 Credits
- Choose one course from Gen Ed - Mode 5 3-4 Credits
- PSY* 247: Industrial and Organizational Psychology 3 Credits
  **Subtotal: 15-16**

- BES* 219: Management and Growth - Small Business 3 Credits
- BMG* 204: Managerial Communication 3 Credits

- BFN* 202: Corporate Finance 4 Credits or
- Elective - Business 3-4 Credits 
  
- Choose one course from Gen Ed - Mode 1 3 Credits
- ACC* 125: Accounting Computer Applications I 3 Credits
  **Subtotal: 15-16**

**Total Credits Required: 62-66**

Note:

- Students who receive credit for QM 110 have fulfilled the BBG* 208 requirement.
- Business electives include courses with designations of ACC*, BES*, BFN*, BFP*, BBG*, BMG*, and BMK*.
  Students without a strong foundation in computer skills should take CSA* 115: Windows.
Environmental Science, A.S.

Program Design
The field of environmental science has enjoyed rapid growth since the mid-1980s. Occupational employment projections compiled by the CT State Department of Labor show that job opportunities are expected to be very good for environmental scientists. An increase in local, state and federal laws concerning environmental issues has provided increased opportunity for professionals in this field. Growth is also expected to be fueled by demands for waste regulation and for compliance monitoring. The emerging field of sustainable energy is spurring the growth of job opportunities as a result of the ever-increasing awareness to monitor and improve the quality of the environment, to study the affect that human activity has on terrestrial and aquatic systems, and to find ways to restore them. As the demand for oil and other fuels continues to increase, bringing with it the threat of increased pollution, an increasing amount of research is focusing on the development of alternate renewable and non-polluting energy sources. Finally, data from the Geological Society of America (GSA) show a rapid increase in positions supporting the fields of geohydrology, environmental geology and engineering geology. Increasingly, public policy is requiring that industries comply with environmental regulating air and water quality. (Bureau of Labor Statistics, U.S. Department of Labor, Occupational Outlook Handbook, 2006-07 Edition)

Curriculum
The Environmental Science associate degree program, with its strong foundation in basic sciences and mathematics, will allow students interested in transferring to continue their studies in geosciences (including hydrology, soil, and agricultural resources), ecology (including forestry and wildlife biology), energy resources and sustainability, natural resources management and environmental biology or chemistry.

Learning Outcomes
Upon successful completion of all Environmental Science degree requirements, graduates will:
1. Develop an understanding of the scientific basis for issues affecting the environment and their impact on society as well as an appreciation for the role of sustainable technologies in addressing these issues.
2. Understand and be skilled at collecting, analyzing and presenting scientific data by various means including up-to-date computer technologies.
3. Be able to use the scientific method for problem solving in biology, chemistry, geology, physics and environmental sciences, and be able to use this skill to address issues related to the environment.
4. Research and assess the accuracy of appropriate information sources involving both print literature and electronic sources, including online databases and publications.
5. Communicate knowledge and understanding of environmental sciences and related societal issues in appropriate written, oral and mathematical means.
6. Demonstrate interrelationships and connections with other subject areas associated with a college-level education.
7. Use a wide array of knowledge, principles and skills acquired in laboratory, field and lecture settings for use in transferring to baccalaureate degree program or for use in seeking further training toward a technical degree.

In addition, the graduate will complete the comprehensive learning outcomes identified with the General Education Component.
Environmental Science Requirement

- BIO* 173: Introduction to Ecology 4 Credits
- CHE* 121: General Chemistry I 4 Credits
- EVS* 100: Introduction to Environmental Science 3 Credits
- ENG* 101: Composition 3 Credits (Gen Ed - Mode 2)
- Choose one course from Gen Ed - Mode 1 3 Credits

Subtotal: 17

- CHE* 122: General Chemistry II 4 Credits
- EVS* 130: Sustainable Energy and the Environment 3 Credits
- MAT* 186: Precalculus 4 Credits (Gen Ed - Mode 4)
- GLG* 121: Introduction to Physical Geology 4 Credits

Subtotal: 15

- EVS* 131: Sustainable Energy for Your Community 3 Credits
- BIO* 121: General Biology I 4 Credits (Gen Ed - Mode 5)
- COM* 173: Public Speaking 3 Credits (Gen Ed - Mode 3)
- MAT* 165: Elementary Statistics with Computer Applications 4 Credits
- PHY* 121: General Physics I 4 Credits

Subtotal: 18

- BIO* 122: General Biology II 4 Credits
- Choose one course from Gen Ed - Mode 6 3 Credits
- ECN* 102: Principles of Microeconomics 3 Credits (Gen Ed - Mode 6)
- PHY* 122: General Physics II 4 Credits

Subtotal: 14

Total Credits Required: 64
Foodservice Management, A.S.

Program Design
The Foodservice Management associate degree program provides education and training in subjects ranging from food production to food protection, marketing and management. Students will also take general education courses to improve employability, job performance and transferability to another college or university. The Foodservice Management program is accredited by the American Culinary Federation Educational Institute. In addition to classroom and laboratory study, students will participate in an individually-planned, 300-hour cooperative work experience program. Students earn credit toward graduation while working. Graduates have transferred and earned bachelor’s degrees at such colleges and universities as Central Connecticut State University, Cornell University, Johnson & Wales University, New England Culinary Institute, University of Massachusetts, and the University of Nevada, Las Vegas. Students are required to purchase their own official kitchen and table service uniforms, as well as culinary tools and cutlery. In addition to this degree, students may earn a second associate degree in Culinary Arts or Hotel-Tourism Management by taking additional credit hours. Candidates interested in earning double degrees should see a counselor or a hospitality management faculty member.

Curriculum
Students may enroll in this program full- or part-time, day or evening. This program has an active student club that provides a variety of activities to supplement the formal curriculum. Note: Students should consult individual course descriptions for prerequisite information.

Learning Outcomes
Upon successful completion of all Foodservice Management degree program requirements, graduates will:
1. Analyze theory and techniques of food preparation and presentation.
2. Prepare menus incorporating costs, acquisition and inventory controls.
3. Summarize basic principles and concepts of the hospitality industry.
4. Create and cater events.
5. Prepare basic foods in quantity, including various regional foods.
6. Prepare ethnic cuisine in quantity.
7. Evaluate the establishment and maintenance of a safe and sanitary foodservice operation, including Hazard Analysis Critical Control Point and State of Connecticut law.
8. Setup and operate the ‘front of the house.’
9. Summarize managerial techniques and human resources management practice.
10. Demonstrate appropriate problem-solving techniques in addressing management problems.
11. Evaluate equipment design and layout for a foodservice facility.
12. Apply knowledge of computers to the hospitality industry.
13. Differentiate styles of marketing, sales analysis and planning for the hospitality industry.
In addition, the graduate will complete the comprehensive learning outcomes identified with the General Education Core.
Foodservice Management Requirements

- HSP* 108: Sanitation and Safety 3 Credits
- HSP* 101: Principles of Food Preparation 3 Credits
- HSP* 100: Introduction to the Hospitality Industry 3 Credits
- ENG* 101: Composition 3 Credits (Gen Ed - Mode 2)
- Choose one course from Gen Ed - Mode 4 3 Credits

**Subtotal: 15**

- HSP* 112: Advanced Food Preparation 4 Credits
- BIO* 111: Introduction to Nutrition 3 Credits (Gen Ed - Mode 5)
- Choose one course from Gen Ed - Mode 5 3 Credits
- Choose one course from Gen Ed - Mode 3 3 Credits
- ACC* 115: Financial Accounting 4 Credits

**Subtotal: 17**

- HSP* 211: Food and Beverage Cost Control 3 Credits
- HSP* 201: International Foods 4 Credits
- HSP* 237: Hospitality Marketing 3 Credits
- HSP* 117: Beverage Management 3 Credits
- HSP* 233: Hospitality Human Resource Management 3 Credits

**Subtotal: 16**

- Choose one course from Gen Ed - Mode 6 3 Credits
- HSP* 296: Cooperative Education/Work Experience 3 Credits
- HSP* 210: Buffet Catering 4 Credits
- GEO* 111: World Regional Geography 3 Credits
  Cross-listed courses (choose one)
- HSP* 238: Relationship Marketing 3 Credits
- BMK* 260: Relationship Marketing 3 Credits

**Subtotal: 16**

**Total Credits Required: 64**

**Dual Degree in Hotel-Tourism Management Requirements**

To complete a dual degree in Hotel-Tourism Management, students should take the following courses:

- GEO* 204: Geography and Tourism Development 3 Credits
- HSP* 242: Hotel Management 3 Credits
- BMG* 204: Managerial Communication 3 Credits
- Electives 6 Credits

**Dual Degree in Culinary Arts Requirements**

To complete a dual degree in Culinary Arts, students should take the following courses:

- HSP* 103: Principles of Baking I 3 Credits
- HSP* 107: Icing Artistry I 3 Credits
- HSP* 215: Principles of Baking II 3 Credits
- HSP* 216: Artisan Bread 3 Credits
- HSP* 225: Principles of Baking III 3 Credits or
- HSP* 207: Icing Artistry II 3 Credits
General Studies, A.S.

Program Design

The General Studies associate degree program leads to an associate in science degree. This program offers the broadest range of electives of any major at the college. General Studies is a concentration that is appropriate for transfer, for employment and for a self-designed independent course of study.

Education

If considering a career in education, students need to select a transfer institution early and consult with a counselor.

Curriculum

Students may enroll in this program full- or part-time. For those students who are not prepared for the mathematics and English courses required in the program, the college offers a wide range of developmental classes.

A minimum of 60 semester hours of credit is required in this program as follows:

Learning Outcomes

Upon successful completion of all General Studies degree program requirements, graduates will:

1. Demonstrate a clear connection among elective choices and their personal, occupational or academic ambitions.
2. Work with others, including culturally and intellectually diverse peoples; think critically; and gain an appreciation for life-long learning.
3. Become adept in written and spoken communication skills.

In addition, the graduate will complete the comprehensive learning outcomes identified with the General Education Core.
General Studies Program Required Courses

General Education Intellectual Skills Courses

- ENG* 101: Composition 3 Credits
- MAT* 109: Quantitative Literacy 3 Credits (Or any higher level MAT* course)
- IDS* 201: Explore [Theme] 3 Credits *

General Education Knowledge Areas

Chose one course from each Knowledge Area below; then choose one additional course from one of the three Knowledge Areas.
- Knowledge of the Physical and Natural World
- Knowledge of Human Experience and Behavior
- Knowledge of Human Thought and Expression

General Studies Requirements

- Choose from two courses in English, fine arts, foreign languages, humanities, music, philosophy, communication (Mode 3) and theatre. 6-8 Credits
- Choose from any course in astronomy, biology, chemistry, earth science, geology, physics or other physical science that includes a laboratory. 4 Credits
- Choose any two courses in anthropology, economics, geography, history, political science, psychology, social science and sociology. 6 Credits
- Choose any open elective courses. 23 Credits

Total Credits Required: 60-62

Notes:

* Transfer students and students changing their major to Liberal Arts or General Studies may not be required to take IDS* 201. IDS*201 may not transfer to other schools as a General Education course. Students may want to consider taking a General Education Mode 1 course in its place. Please consult with an advisor.
Please note: cooperative education courses are available as an elective to General Studies students. Please see Academic Information or contact the Cooperative Education office for more information.
All first or second semester students majoring in General Studies are encouraged to take the course SD 111: First Year Experience: Foundations for College Success; or SSC* 150: Transition Development.
Graphic Design, A.S.

Program Design

The purpose of the Graphic Design associate degree program is:
- to provide a graphic design transfer program in the area of design, fine arts, art education, computer graphics and advertising;
- to offer a degree program for those considering an entry-level position in related commercial art fields; and
- to provide greater technical knowledge and awareness of the creative visual arts to the community.

The program is structured to equip students with a sound foundation in technical skills, graphic design concepts, aesthetics, terminology and vocabulary, and to provide an awareness of the application of acquired technical knowledge. Computer use will be an integral part of the program.

Curriculum

Students may enroll in art and graphic design courses full- or part-time. There are no requirements or prerequisites for students wishing to take courses part-time or as electives for other programs. Graphic design/fine arts faculty members are available for consultation with students who wish to enroll in the program and, thereafter, for course selection and transfer information.

Learning Outcomes

Upon successful completion of all Graphic Design degree program requirements, graduates will:
1. Demonstrate an understanding and appreciation of graphic design as a form of communication and art.
2. Demonstrate an ability to use design processes and principles to create visual products that convey a specific message to a targeted audience.
3. Demonstrate creative thinking skills and strategies and use problem-solving techniques across a wide range of media.
4. Demonstrate an understanding of how creative processes and skills are integrated with printing and other reproduction processes found in the graphic design field.
5. Demonstrate knowledge of new technologies such as computer graphics that continue to evolve into important production tools.
6. Demonstrate an awareness of the varied career paths within the graphics industry including, but not limited to, art direction, illustration, project design, production art, graphic design and media direction.

In addition, the graduate will complete the comprehensive learning outcomes identified with the General Education Core.
Graphic Design Requirements

- ENG* 101: Composition 3 Credits (Gen Ed - Mode 2)
- ART* 103: Art History III 3 Credits (Gen Ed - Mode 1) or
  ART* 104: Contemporary Art History 3 credits (Gen Ed - Mode 1)
- ART* 111: Drawing I 3 Credits
- GRA* 221: Illustration I 3 Credits
- Choose one course from Gen Ed - Mode 6 3 Credits
  **Subtotal: 15**
- ENG* 110: Introduction to Literature 3 Credits (Gen Ed - Mode 3)
- ART* 151: Painting I 3 Credits or
  ART* 155: Watercolor I 3 Credits
- GRA* 222: Illustration II 3 Credits
- Elective history 3 Credits†
- Choose one course from Gen Ed - Mode 5 3 Credits
- Elective studio 3 Credits
  **Subtotal: 18**
- ART* 101: Art History I 3 Credits
- GRA* 151: Graphic Design I 3 Credits
- DGA* 111: Introduction to Computer Graphics 3 Credits
- Choose one course from Gen Ed - Mode 3 3 Credits
- DGA* 240: Web Page Design 3 Credits
  **Subtotal: 15**
- GRA* 252: Graphic Design II 3 Credits
- DGA* 212: Advanced Computer Graphics 3 Credits
- Elective liberal arts and science 3 Credits
- Choose one course from Gen Ed - Mode 4 3 Credits
- Elective studio or
- ART* 292: Cooperative Education 3 Credits
  **Subtotal: 15**

**Total Credits Required: 63**

**Note:**

† History elective: choose from any of the Mode 6 History choices: HIS* 101, HIS* 102, HIS* 121, HIS* 122, HIS* 201 or HIS* 202
Health and Exercise Science, A.S.

Program Design
The Health and Exercise Science associate degree program is appropriate for students who plan to transfer to a baccalaureate institution in preparation for opportunities as physical education teachers, athletic trainers, corporate fitness coordinators, wellness coordinators, recreation majors and coaches. Students who complete this program will also receive a State of Connecticut Coaching Certificate.

Curriculum
Students may select a full- or part-time plan, attending day or evening. The Health and Exercise Science program is designed for students who have an interest in understanding the importance of physical activity and exercise and their direct connection to the prevention of disease, and the promotion of wellness and good health. It offers a mix of theory, applied courses and internships for majors. The courses in the program address the biophysical, physiological, health and socio-cultural aspects of the need for physical activity and exercise in our daily lives. Understanding the human body and the role of exercise in the prevention of disease are important aspects of this degree program. The program includes six core courses that apply specifically to Health and Exercise Science (HPE), eleven liberal arts and science courses with an emphasis on the sciences, and seven elective courses.

Learning Outcomes
Upon successful completion of all Health and Exercise Science degree program requirements, graduates will:

1. Understand the basic concepts of fitness, health and wellness.
2. Evaluate a subject’s wellness profile.
3. Understand the basic concepts of nutrition and prepare diet analyses.
4. Develop a behavioral modification plan to maximize the health and fitness of a subject.
5. Implement a behavioral modification plan to maximize the health and fitness of a subject.
6. Evaluate and develop a recreation program for children and adults with disabilities.
7. Apply concepts of fitness, health and wellness at a fieldwork placement site.

Health and Exercise Science Requirements
- BIO* 115: Human Biology 4 Credits (Gen Ed - Mode 5)
- ENG* 101: Composition 3 Credits (Gen Ed - Mode 2)
- Choose any CSA*, CSC* or CST* course 2-3 Credits
  Choose any HPE* 104 – HPE* 193 course 1 Credit
- HPE* 104: Adventure Based Dynamics
- HPE* 110: Aerobics
- HPE* 116: Weight Training
- HPE* 119: Fitness Walking
- HPE* 147: Self Defense
- HPE* 164: Bowling
- HPE* 191: Basketball
- HPE* 192: Softball
- HPE* 193: Soccer
- HPE* 217: Principles & practices of Coaching 3 Credits ‡
- SOC* 101: Principles of Sociology 3 Credits

Subtotal: 16-17
- HPE* 252: Introduction to Physical Education 3 Credits
- ENG* 200: Advanced Composition 3 Credits (Gen Ed - Mode 3)
Choose any HPE* 104 – HPE* 193 course 1 Credit
- HPE* 104: Adventure Based Dynamics
- HPE* 110: Aerobics
- HPE* 116: Weight Training
- HPE* 119: Fitness Walking
- HPE* 147: Self Defense
- HPE* 164: Bowling
- HPE* 191: Basketball
- HPE* 192: Softball
- HPE* 193: Soccer
- RLS* 101: Introduction to Recreation and Leisure Services 3 Credits
- HPE* 102: Human Performance and Fitness 3 Credits
- HLT* 151: Health and Wellness Promotion 3 Credits

Subtotal: 16

- BIO* 111: Introduction to Nutrition 3 Credits
- HPE* 240: Principles of Fitness 3 Credits
  Choose any HPE* 104 – HPE* 193 course 1 Credit
- HPE* 104: Adventure Based Dynamics
- HPE* 110: Aerobics
- HPE* 116: Weight Training
- HPE* 119: Fitness Walking
- HPE* 147: Self Defense
- HPE* 164: Bowling
- HPE* 191: Basketball
- HPE* 192: Softball
- HPE* 193: Soccer
- PSY* 111: General Psychology I 3 Credits (Gen Ed - Mode 6)
- Choose one course from Gen Ed - Mode 1 3 Credits
- Choose any ANT*, ECN*, GEO*, HIS*, PSY*, SOC* or SSC* course 3 Credits

Subtotal: 16

- HLT* 295: Allied Health Coop Work Experience 3 Credits
- Choose one course from Gen Ed - Mode 4 3 Credits ‡
  Choose any HPE* 104 – HPE* 193 course 1 Credit
- HPE* 104: Adventure Based Dynamics
- HPE* 110: Aerobics
- HPE* 116: Weight Training
- HPE* 119: Fitness Walking
- HPE* 147: Self Defense
- HPE* 164: Bowling
- HPE* 191: Basketball
- HPE* 192: Softball
- HPE* 193: Soccer
- HPE* 242: Introduction to Athletic Training 3 Credits
- HPE* 257: Adapted Physical Education 3 Credits
- COM* 173: Public Speaking 3 Credits

Subtotal: 16

Total Credits Required: 64-65
Hotel-Tourism Management, A.S.

Program Design
The Hotel-Tourism associate degree program provides education and training for students who would like to work full-time after graduation or continue their studies at another institution to earn a bachelor’s degree. In the first year, students are introduced to the hospitality industry, studying quantity foods production and food protection. In the second year students focus on hotel management procedures; food, beverage and labor cost controls; and geography and tourism development. Students must participate in an individually planned 300-hour cooperative work program, earning credit toward graduation while employed.

Students of this program have matriculated to Central Connecticut State University with junior status in their Hospitality and Tourism Studies Program. Graduates have also transferred and earned bachelor's degrees from other colleges and universities such as Cornell University, University of Massachusetts, University of New Hampshire, University of New Haven and the University of Nevada, Las Vegas. Students must purchase official kitchen and table service uniforms, as well as culinary tools and cutlery. In addition to this degree, students may earn a second associate degree in Foodservice Management or Culinary Arts by taking additional credit hours. Candidates interested in earning double degrees should see a counselor or a hospitality management faculty member.

Curriculum
Students may attend full- or part-time, day or evening. This program has an active student club that provides a variety of activities to supplement the formal curriculum.

Note: Students should consult individual course descriptions for prerequisite information.

Learning Outcomes
Upon successful completion of all Hotel-Tourism Management degree program requirements, graduates will:

1. Analyze theory and techniques of food preparation and presentation.
2. Prepare menus incorporating costs, acquisition and inventory controls.
3. Summarize basic principles and concepts of the hospitality industry.
4. Prepare basic foods in quantity, including various regional foods.
5. Evaluate the establishment and maintenance of a safe and sanitary foodservice operation, including Hazard Analysis Critical Control Point and State of Connecticut law.
6. Setup and operate the ‘front of the house.’
7. Summarize managerial techniques and human resources management practice.
8. Demonstrate appropriate problem-solving techniques in addressing management problems.
9. Evaluate equipment design and layout for a foodservice facility.
10. Apply knowledge of computers to the hospitality industry.
11. Differentiate styles of marketing, sales analysis and planning for the hospitality industry.
12. Demonstrate the practical approach to the various aspects of food and beverage cost control and purchasing.
13. Outline the legal responsibilities and rights of guests and employees.
14. Interpret hospitality sales practices and market analysis from sales to actual activity.
15. Apply office procedures and forms necessary to room guests and control cash.

In addition, the graduate will complete the comprehensive learning outcomes identified with the General Education Core.
Hotel-Tourism Management Requirements

- HSP* 101: Principles of Food Preparation 3 Credits
- HSP* 100: Introduction to the Hospitality Industry 3 Credits
- HSP* 108: Sanitation and Safety 3 Credits
- ENG* 101: Composition 3 Credits (Gen Ed - Mode 2)
- Choose one course from Gen Ed - Mode 4 3 Credits

Subtotal: 15

- HSP* 112: Advanced Food Preparation 4 Credits
- BIO* 111: Introduction to Nutrition 3 Credits (Gen Ed - Mode 5)
- ACC* 115: Financial Accounting 4 Credits
- Choose one course from Gen Ed - Mode 1 3 Credits

Cross-listed courses (choose one)
- BMK* 260: Relationship Marketing 3 Credits or
- HSP* 238: Relationship Marketing 3 Credits

Subtotal: 17

- HSP* 211: Food and Beverage Cost Control 3 Credits
- HSP* 233: Hospitality Human Resource Management 3 Credits
- HSP* 237: Hospitality Marketing 3 Credits
- Choose one course from Gen Ed - Mode 6 3 Credits
- GEO* 111: World Regional Geography 3 Credits

Subtotal: 15

- HSP* 296: Cooperative Education/Work Experience 3 Credits
- HSP* 242: Hotel Management 3 Credits
- Choose one course from Gen Ed - Mode 3 3 Credits
- BMG* 204: Managerial Communication 3 Credits
- GEO* 204: Geography and Tourism Development 3 Credits

Subtotal: 15

Total Credits Required: 62

Dual Degree in Foodservice Management Requirements

To complete a dual degree in Foodservice Management, students should take the following courses:

- HSP* 201: International Foods 4 Credits
- HSP* 210: Buffet Catering 4 Credits
- HSP* 117: Beverage Management 3 Credits
- Electives 4 Credits
Journalism Option, Communication, A.S.

Program Design

The Journalism Option, Communication associate degree program is designed for students interested in pursuing careers in print journalism as correspondents, reporters or feature writers. Students will be expected to build strong writing and communication skills, as well as a broad understanding of history, government, economics, social science and ethics – all areas critical to the practicing journalist. Cooperative education/work experience is required.

Learning Outcomes

Upon successful completion of all Journalism Option, Communication degree program requirements, graduates will

1. Report and write basic news stories including obituaries, accident/fire/disaster stories, news conferences and town meetings, using standard news style and applying the concepts of fairness and accuracy.
2. Identify, report and write feature stories.
4. Operate under the Society of Professional Journalists Code of Ethics and understand the ethics involved in making journalistic and editorial choices.
5. Choose appropriate sources, conduct interviews and use quotation and attribution correctly.
6. Define and assess the role of the news media within the context of history, government and society.

In addition, the graduate will complete the comprehensive learning outcomes identified with the General Education Core.
Journalism Option Requirements

- ECN* 101: Principles of Macroeconomics 3 Credits or
- ECN* 102: Principles of Microeconomics 3 Credits

- ENG* 101: Composition 3 Credits (Gen Ed - Mode 2)
- PSY* 111: General Psychology I 3 Credits (Gen Ed - Mode 6)
- COM* 173: Public Speaking 3 Credits
- Choose one course from Gen Ed - Mode 3 3 Credits

Subtotal: 15

- COM* 108: Contemporary Issues in Media 3 Credits
- COM* 222: Reporting and Writing News Stories. 3 Credits
- ENG* 110: Introduction to Literature 3 Credits (Gen Ed - Mode 3)

- HIS* 102: Western Civilization II 3 Credits or
- HIS* 202: United States History II 3 Credits or
- HIS* 213: The U.S. Since World War II 3 Credits

- POL* 111: American Government 3 Credits or
- POL* 112: State and Local Government 3 Credits

Subtotal: 15

- ENG* 200: Advanced Composition 3 Credits
- COM* 247: Television Writing 3 Credits
- COM* 201: Introduction to Public Relations 3 Credits
- Choose one course from Gen Ed - Mode 4 3 Credits
- COM* 295: Internship I 3 Credits

Subtotal: 15

- COM* 229: Creative Writing, Non Fiction. 3 Credits
- COM* 101: Introduction to Mass Communication 3 Credits
- SOC* 101: Principles of Sociology 3 Credits
- Choose one course from Gen Ed - Mode 5 3-4 Credits
- Choose one course from Gen Ed - Mode 6 3-4 Credits

Subtotal: 15-16

Total Credits Required: 60-61
Liberal Arts and Science, A.A.

Program Design
The Liberal Arts and Science associate in art degree program provides students with a broad background preparing them to move directly into the workforce or for transfer to a bachelor’s degree program at another college or university. Students planning to continue their education in a baccalaureate degree major such as English, history, pre-law, French or psychology will be well served by the Liberal Arts curriculum. By following the curriculum guidelines detailed on this page and by working with an advisor to choose courses related to the student’s interests, a student can, in a sense, customize his or her own degree program.

Curriculum
Students may enroll in this program full- or part-time. For any student who is not prepared for the required mathematics and English courses, MCC offers a wide range of developmental classes.

Learning Outcomes
Upon successful completion of all Liberal Arts and Science associate degree program requirements, graduates will
1. Read, write and communicate analytically in forms that involve and document outside sources.
2. Understand the major literary, artistic and philosophical features of western and non-western cultures.
3. Define the concept and function of culture.
4. Demonstrate knowledge of the major developments in western civilization.
5. Understand world events in terms of social scientific theories and paradigms.
6. Demonstrate the ability to conduct meaningful research.
7. Use mathematical tools and technology to create mathematical models.
8. Analyze and solve problems numerically, graphically and symbolically.
9. Use appropriate techniques to gather and analyze data.
10. Apply the scientific method to solving problems.
11. Understand and apply scientific principles.
12. Work with others, including culturally and intellectually diverse peoples; think critically; and gain an appreciation for life-long learning.
13. Demonstrate proficiency in a foreign language at the intermediate level.

In addition, the graduate will complete the comprehensive learning outcomes identified with the General Education Core.

Students interested in pursuing an A.A. degree in Liberal Arts and Science with a humanities or social science emphasis, such as anthropology, economics, English, foreign languages, geography, history, philosophy, political science, psychology, sociology or speech communication, should contact the Liberal Arts Division.

Students selecting Liberal Arts and Science as a major who have completed 16 transferable credits or fewer may be eligible to enroll in the Guaranteed Admissions Program with the University of Connecticut. The Guaranteed Admissions Program is designed for students choosing to transfer to the College of Arts and Sciences, the College of Agriculture and Natural Resources, or the School of Business at UConn.
Liberal Arts and Science Program Required Courses

General Education Requirements

General Education Intellectual Skills Courses

- ENG* 101: Composition 3 Credits
- IDS* 201: Explore [Theme] 3 Credits *

Choose one of the following:
- MAT* 146: Math for Liberal Arts 3 Credits
- MAT* 165: Elementary Statistics with Computer Applications 4 Credits
- MAT* 172: College Algebra 3 Credits
- MAT* 186: Precalculus 4 Credits
- MAT* 254: Calculus I 4 Credits
- MAT* 222: Statistics II with Technology Applications 3 Credits

General Education Knowledge Area Courses

Knowledge of the Physical and Natural World (7-8 Credits)
Choose two courses from General Education - Knowledge of the Physical and Natural World, (at least one must be a 4-credit lab), or
Choose one of the following sequences:
- BIO* 121: General Biology I 4 Credits and
- BIO* 122: General Biology II 4 Credits or
- CHE* 121: General Chemistry I 4 Credits and
- CHE* 122: General Chemistry II 4 Credits or
- PHY* 121: General Physics I 4 Credits and
- PHY* 122: General Physics II 4 Credits or
- PHY* 221: Calculus-Based Physics I 4 Credits and
- PHY* 222: Calculus-Based Physics II 4 Credits

Knowledge of Human Experience and Behavior (3 Credits)
- ANT* 101: Introduction to Anthropology 3 Credits or
- PSY* 111: General Psychology I 3 Credits or
- SOC* 101: Principles of Sociology 3 Credits

Knowledge of Human Thought and Expression (3 Credits)
- PHL* 101: Introduction to Philosophy 3 Credits or
- PHL* 111: Ethics 3 Credits

Subtotal: 22-25
Liberal Arts and Science Requirements

- ENG* 110: Introduction to Literature 3 Credits
- ENG* 200: Advanced Composition 3 Credits

Choose one of the following:
- ENG* 232: British Literature II 3 Credits
- ENG* 263: Women in Poetry 3 Credits
- ENG* 221: American Literature I 3 Credits
- ENG* 222: American Literature II 3 Credits
- ENG* 245: Early Western Literature 3 Credits
- ENG* 246: Modern Western Literature 3 Credits
- ENG* 262: Women in Literature 3 Credits

- Choose: single foreign language 6-8 Credits‡

Choose one of the following:
- HIS* 101: Western Civilization I 3 Credits
- HIS* 102: Western Civilization II 3 Credits
- HIS* 121: World Civilization I 3 Credits
- HIS* 122: World Civilization II 3 Credits

Choose one of the following:
- HIS* 201: United States History I 3 Credits
- HIS* 202: United States History II 3 Credits
- HIS* 215: The History Of Women in the US 3 Credits
- HIS* 224: The American Indian 3 Credits
- HIS* 242: Modern Ireland 3 Credits
- HIS* 272: Modern China 3 Credits
- HIS* 280: Modern Africa 3 Credits
- HIS* 284: South Africa 3 Credits

Choose one of the following:
- ECN* 101: Principles of Macroeconomics 3 Credits
- ECN* 102: Principles of Microeconomics 3 Credits
- GEO* 101: Introduction to Geography 3 Credits
- GEO* 111: World Regional Geography 3 Credits
- POL* 101: Introduction to Political Science 3 Credits
- POL* 111: American Government 3 Credits

Subtotal: 21-23

Electives 15 Credits

Choose four liberal arts courses from the list below or one free elective:
ANT*, ART*, AST*, BIO* (with the exception of BIO* 112), CHE*, COM*, EAS*, ECN*, ENG* (with the exception of ENG* 043, ENG* 003, ENG* 066 and ENG* 093), EVS*, FRE*, GEO*, GLG*, MET*, HIS*, HUM*, MAT* (with the exceptions of MAT* 075, MAT* 095 and MAT* 096), MUS*, OCE*, PHL*, PHY*, POL*, PSY*, SOC*, SPA*, THR*

Total Credits Required: 61-66
Notes:

* Transfer students and students changing their major to Liberal Arts or General Studies may not be required to take IDS* 201. IDS* 201 may not transfer to other schools as a General Education course. Students may want to consider taking a General Education Mode 1 course in its place. Please consult with an advisor.

‡ The completion of three years of study in a single foreign language at the high school level fulfills the foreign language requirement for the Liberal Arts and Science, A.A. Degree. Some colleges (such as the University of Connecticut) have as a graduation requirement four semesters of study in a single language. It is possible to complete those four semesters of language study at MCC. (Check specific transfer requirements for other colleges and universities). If a student is able to waive the required 6-8 credits of a foreign language, he/she must still take 6-8 credits in humanities or Liberal Arts courses.

Additional Courses

AFRICAN AMERICAN STUDIES: In combination with the A.A. degree requirements, students who are interested in an academic emphasis in African American Studies may want to select the following elective courses:
HUM* 172, ENG* 222, ANT* 105, MUS* 107, SSC* 201, HIS* 214, HIS* 218, SOC* 220

WOMEN'S STUDIES: In combination with the A.A. degree requirements, students who are interested in an academic emphasis in Women’s Studies may want to select the following elective courses:
ANT* 105, SOC* 212, SOC 262, BIO* 103, COM* 209, ENG* 263, HIS* 215

PSYCHOLOGY: In combination with the A.A. degree requirements, students who are interested in an academic emphasis in psychology may want to select the following elective courses:
PSY* 111, PSY* 112 and at least two of the following, PSY* 201 or PSY* 203, PSY* 240, PSY* 243, PSY* 245.
It is also recommended that students take MAT* 165, SOC* 101 or ANT* 101, and BIO* 105 or BIO* 115 or BIO* 121.
Liberal Arts and Science, A.S.

Program Design
The Liberal Arts and Science associate in science degree program provides students with a broad background preparing them for transfer to a bachelor’s degree program at another college or university or to move directly into the workforce. Students planning to continue their education in a baccalaureate degree major such as agriculture, biology, chemistry, environmental science, geology, physics or psychology will be well served by the Liberal Arts curriculum. By following the curriculum guidelines detailed on this page and by working with an advisor to choose courses related to the student’s interests, a student can, in a sense, customize his or her own degree program.

Curriculum
Students may enroll in this program full-or part-time. For any student who is not prepared for the required mathematics and English courses, MCC offers a wide range of developmental classes.

Foreign Language Requirements
Although the associate in science degree does not require the study of a language, the college or university to which a student wishes to transfer may require two to four semesters of the same foreign language. These requirements may be met at MCC.

Learning Outcomes
Upon successful completion of all Liberal Arts and Science associate degree program requirements, graduates will
1. Read, write and communicate analytically in forms that involve and document outside sources.
2. Understand the major literary, artistic and philosophical features of western and non-western cultures.
3. Define the concept and function of culture.
4. Demonstrate knowledge of the major developments in western civilization.
5. Understand world events in terms of social scientific theories and paradigms.
6. Demonstrate the ability to conduct meaningful research.
7. Use mathematical tools and technology to create mathematical models.
8. Analyze and solve problems numerically, graphically and symbolically.
9. Use appropriate techniques to gather and analyze data.
10. Apply the scientific method to solving problems.
11. Understand and apply scientific principles.
12. Work with others, including culturally and intellectually diverse peoples; think critically; and gain an appreciation for life-long learning.

In addition, the graduate will complete the comprehensive learning outcomes identified with the General Education Core.
Students selecting the Liberal Arts and Science as a major who have completed 16 transferable credits or fewer may be eligible to enroll in the Guaranteed Admissions Program with the University of Connecticut (UConn). The Guaranteed Admissions Program is designed for students choosing to transfer to the College of Arts and Sciences, the College of Agriculture and Natural Resources, or the School of Business at UConn.
Liberal Arts and Science Program Required Courses

General Education Requirements

General Education Intellectual Skills Courses

- ENG* 101: Composition 3 Credits
- IDS* 201: Explore [Theme] 3 Credits *

Choose two courses from the following: (6-9 Credits)
- MAT* 146: Math for Liberal Arts 3 Credits
- MAT* 148: Geometry 3 Credits
- MAT* 165: Elementary Statistics with Computer Applications 4 Credits
- MAT* 172: College Algebra 3 Credits
- MAT* 186: Precalculus 4 Credits
- MAT* 222: Statistics II with Technology Applications 3 Credits
- MAT* 254: Calculus I 4 Credits
- MAT* 256: Calculus II 4 Credits

General Education Knowledge Area Courses

Knowledge of the Physical and Natural World

Choose one of the following sequences (8 Credits)
- BIO* 121: General Biology I 4 Credits and
- BIO* 122: General Biology II 4 Credits
or
- CHE* 121: General Chemistry I 4 Credits and
- CHE* 122: General Chemistry II 4 Credits
or
- PHY* 121: General Physics I 4 Credits and
- PHY* 122: General Physics II 4 Credits
or
- PHY* 221: Calculus-Based Physics I 4 Credits and
- PHY* 222: Calculus-Based Physics II 4 Credits

Knowledge of Human Experience and Behavior (3 credits)

- ANT* 101: Introduction to Anthropology 3 Credits or
- PSY* 111: General Psychology I 3 Credits or
- SOC* 101: Principles of Sociology 3 Credits

Knowledge of Human Thought and Expression (3 credits)

- PHL* 101: Introduction to Philosophy 3 Credits or
- PHL* 111: Ethics 3 Credits

Subtotal: 29-32
Liberal Arts and Science Requirements

Choose one course from any General Education Knowledge Area 3 Credits
Knowledge of Human Experience and Behavior  or
Knowledge of Human Thought and Expression  or
Knowledge of the Physical and Natural World

- ENG* 110: Introduction to Literature 3 Credits
- ENG* 200: Advanced Composition 3 Credits

Choose one of the following:
- ENG* 232: British Literature II 3 Credits
- ENG* 263: Women in Poetry 3 Credits
- ENG* 221: American Literature I 3 Credits
- ENG* 222: American Literature II 3 Credits
- ENG* 245: Early Western Literature 3 Credits
- ENG* 246: Modern Western Literature 3 Credits
- ENG* 262: Women in Literature 3 Credits

History:
Choose one of the following:
- HIS* 101: Western Civilization I 3 Credits
- HIS* 102: Western Civilization II 3 Credits
- HIS* 121: World Civilization I 3 Credits
- HIS* 122: World Civilization II 3 Credits

Choose one of the following:
- HIS* 201: United States History I 3 Credits
- HIS* 202: United States History II 3 Credits
- HIS* 215: The History Of Women in the US 3 Credits
- HIS* 224: The American Indian 3 Credits
- HIS* 242: Modern Ireland 3 Credits
- HIS* 280: Modern Africa 3 Credits
- HIS* 272: Modern China 3 Credits
- HIS* 284: South Africa 3 Credits

Choose one of the following:
- ECN* 101: Principles of Macroeconomics 3 Credits
- ECN* 102: Principles of Microeconomics 3 Credits
- GEO* 101: Introduction to Geography 3 Credits
- GEO* 111: World Regional Geography 3 Credits
- POL* 101: Introduction to Political Science 3 Credits
- POL* 111: American Government 3 Credits
- POL* 112: State and Local Government 3 Credits

Subtotal: 18
Electives 15 Credits

Choose four liberal arts courses from the list below or one free elective:

ANT*, ART*, AST*, BIO* (with the exception of BIO* 112), CHE*, COM*, EAS*, ECN*, ENG* (with the exception of ENG* 043, ENG* 003, ENG* 066 and ENG* 093), EVS*, FRE*, GEO*, GLG*, MET*, HIS*, HUM*, MAT* (with the exceptions of MAT* 075, MAT* 095 and MAT* 096), MUS*, OCE*, PHL*, PHY*, POL*, PSY*, SOC*, SPA*, THR*

Total Credits Required: 62-65

Additional Courses

In addition to following the requirements for an A.S. degree, the courses listed below are suggestions of applicable courses to take if you are interested in transferring to a certain major. Be sure and meet with the academic chair of the particular department to confirm the selected courses.

**BIOLOGY:** For students who want to transfer into bachelor's degree programs in ecology, human biology, biotechnology and secondary education, as well as pre-medical, pre-dental and pre-veterinary studies. BIO* 211, BIO* 212, ENG* 114, MAT* 254 (formerly MAT* 250), MAT* 256 and MAT* 165. It is also recommended that students take BIO* 121, BIO* 122, and CHE* 121, CHE* 122.

**CHEMISTRY:** For students who want to transfer into a bachelor's degree program leading to job opportunities in such fields as industrial chemistry, chemical and pharmaceutical sales and service, education, dentistry and medicine. MAT* 165, MAT* 285, MAT* 268, CHE* 211, CHE* 212, CHE* 121, CHE* 122, PHY* 221, PHY* 222

**ENVIRONMENTAL SCIENCE:** For students who want to transfer into bachelor's degree programs in agricultural resource management, environmental studies, earth sciences, or ecology and evolutionary biology. EVS* 100, GLG* 121, BIO* 121 and BIO* 122, PHY* 221, PHY* 222, CHE* 121, CHE* 122, MAT* 254 (formerly MAT* 250) are strongly recommended. Note that GEO* 246 and MAT* 165 are also suggested.

**MATHEMATICS:** For students who want to transfer into bachelor's degree programs in mathematics, computer science, information services or related fields. Mathematics graduates may find positions in statistics, actuarial science, operations research, computer programming, systems analysis and teaching. MAT* 272, MAT* 268, MAT* 285, MAT* 287, CSC* 215, PHY* 121, PHY* 122

**PSYCHOLOGY:** For students who want to transfer into bachelor's degree programs in psychology. PSY* 111, PSY* 112 and at least two of the following, PSY* 201 or PSY* 203, PSY* 240, PSY* 243, PSY* 245. It is also recommended that students take MAT* 165, SOC* 101 or ANT* 101, and BIO* 105 or BIO* 115 or BIO* 121.

**PHYSICS:** For students who want to transfer into bachelor's degree majors in physics, engineering physics, physical science or earth science. Physics graduates are prepared to pursue a wide variety of employment opportunities ranging from basic research and development to technical sales and services. PHY* 221, PHY* 222, PHY* 223, MAT* 268, MAT* 285

**PRE-MED/PRE-PROFESSIONAL PROGRAM** (Medical, Dental, Veterinary, and Optometry): Students are advised to check with the transfer institution and confer with their advisor.

In addition to following the requirements for an A.S. degree, you may want to include the following suggested courses as electives in your program of study.

**NUTRITION:** For students interested in nutrition or dietetics. CHE* 121, CHE* 122, BIO* 121, BIO* 122, CHE* 210, BIO* 111, BIO* 211, BIO* 212.

Notes: * Transfer students and students changing their major to Liberal Arts or General Studies may not be required to take IDS* 201. IDS* 201 may not transfer to other schools as a General Education course. Students may want to consider taking a General Education Mode 1 course in its place. Please consult with an advisor.
Management Information Systems, A.S.

Program Design

The Management Information Systems associate degree program is offered to students who would like to continue their studies at another college or university to earn a bachelor’s degree. This program requires a mixture of business, information systems and liberal arts and sciences courses, which students would normally take the first two years at a baccalaureate institution. Students planning to transfer should consult a counselor or faculty advisor about their choice of electives before selecting specific courses. Students should be familiar with the requirements of the institution to which they will transfer credits. We encourage you to select your transfer college or university as early as possible. Also, you should see an advisor before choosing elective courses in this associate degree program because each institution may have specific degree requirements.

Curriculum

Students may enroll in this program full- or part-time. Students should have a sound foundation in mathematics, problem solving and communication skills.

Learning Outcomes

Upon successful completion of all Management Information Systems degree program requirements, graduates will

1. Demonstrate relevant content knowledge of core business disciplines; accounting, business law, management, and marketing.
2. Define information systems and describe their importance to organizations.
3. Describe the basic methodologies used to develop and implement information systems.
4. Apply project management concepts, tools and techniques, to prepare basic documents such as a project charter, project schedule and project scope document.
5. Utilize business application software including spreadsheet, database, presentation, and word processing for business decision-making and analysis.
6. Organize and present information effectively through written, oral and electronic channels.
7. Recognize the importance of working in teams to achieve common goals, and collaborate effectively in group assignments.

In addition, the graduate will complete the comprehensive learning outcomes identified with the General Education Core.
Management Information Systems Requirements

- ACC* 115: Financial Accounting 4 Credits ‡
- CST* 201: Introduction to MIS 3 Credits
- ENG* 101: Composition 3 Credits (Gen Ed - Mode 2)
- COM* 173: Public Speaking 3 Credits
- CSC* 124: Programming Logic and Design with Python 3 Credits

Subtotal: 16

- ECN* 102: Principles of Microeconomics 3 Credits or any Gen Ed - Mode 6
- ACC* 118: Managerial Accounting 4 Credits
- MAT* 165: Elementary Statistics with Computer Applications 4 Credits
- Choose one course from Gen Ed - Mode 1 3 Credits
- BMG* 202: Principles of Management 3 Credits

Subtotal: 17

- CSA* 135: Spreadsheet Applications 3 Credits
- MAT* 158: Functions, Graphs & Matrices 3 Credits
- CST* 131: Networking Theory & Application 4 Credits
- BMK* 201: Principles of Marketing 3 Credits
- Technical/Business elective 3 Credits ‡‡

Subtotal: 16

- MAT* 230: Applied Calculus with a Modeling Approach 3 Credits
- CST* 205: Project Management 4 Credits
- BBG* 234: Legal Environment of Business 3 Credits
- Choose one course from Gen Ed - Mode 5 3-4 Credits

Subtotal: 13-14

Total Credits Required: 62-63

Note:

‡ Eligibility for MAT* 095 or higher and ENG* 101.
‡‡ Technical/Business Electives:
- CST* 150: Web Design & Development I 3 Credits
- CSC* 230: Database Concepts with Web Application 3 Credits
- CSC* 295: Cooperative Education/Work Experience 3 Credits
- BMG* 204: Managerial Communication 3 Credits
- BMG* 210: Organizational Behavior 3 Credits
Manufacturing Engineering Technology, A.S.

Program Design
The Manufacturing Engineering Technology associate degree program is designed to be a broad-based engineering science transfer program that provides a foundation of mathematics and basic science, integrated with program components focusing on introductory manufacturing technology and general education. The program emphasizes the application of mathematics and principles of engineering science to technical manufacturing in order to prepare students for transfer to baccalaureate programs in engineering and engineering sciences with a manufacturing engineering focus. The program also prepares students for employment opportunities in entry and second-level positions in manufacturing and industrial technology fields requiring a combination of technical preparation and a strong general education background.

College of Technology–Technology Pathway Program
The Manufacturing Engineering Technology program provides for direct entry into baccalaureate industrial and engineering technology programs. Upon successful completion of the program, MCC technology studies graduates may continue on with a full two years of credit towards a baccalaureate degree in engineering technology or industrial technology at Central Connecticut State University.

Curriculum
Students may enroll in this program full- or part-time. Courses are offered during day and evening hours. Preparation for the Manufacturing Engineering Technology program includes a high school diploma or equivalent with one year of physics and two years of mathematics, including Algebra I and Algebra II. For students not prepared for the required mathematics and English courses, MCC offers a wide range of developmental and preparatory courses.

Learning Outcomes
Upon successful completion of all Manufacturing Engineering Technology degree program requirements, graduates will
1. Demonstrate team-oriented human skills that permit effective participation in multicultural work and social environments.
2. Apply appropriate mathematical and scientific principles to manufacturing applications.
3. Demonstrate proficiency in engineering fundamentals to analyze manufacturing engineering problems and make appropriate decisions.
4. Assist in the design process to meet effective production objectives.
5. Possess knowledge of engineering materials and be able to demonstrate competency in their selection and utilization.
6. Apply knowledge and skills to develop, interpret and select appropriate manufacturing processes.
7. Maintain a practical knowledge of state-of-the-art hardware and software in support of manufacturing systems.
8. Be aware of and use available information and data sources in support of the manufacturing systems.
9. Apply skills and knowledge to effectively and efficiently plan, organize, implement, measure and control manufacturing processes.
10. Demonstrate a thorough knowledge and understanding of engineering graphics as well as conventional drafting practices, such as orthographic and isometric projection, section, detail, auxiliary views and descriptive geometry, as well as geometric dimensioning and tolerancing basics.
11. Demonstrate a high level of proficiency in the use of state-of-the-art computer-aided design (CAD) software and be able to respond positively to continuous software revisions and upgrades.
12. Demonstrate a thorough understanding of two-dimensional and isometric CAD concepts, procedures and applications.
13. Apply knowledge of computer applications in integrating computer-aided manufacturing, computer numerical control, CAD, spreadsheets, graphs and word processing for manufacturing engineering, and technology documentation and support purposes.

In addition, the graduate will complete the comprehensive learning outcomes identified with the General Education Core.
Manufacturing Engineering Technology Requirements

- EGR* 111: Introduction to Engineering 3 Credits
- MAT* 186: Precalculus 4 Credits
- MFG* 205: Principles of CNC with Mastercam 3 Credits
- EGR* 112: Engineering Drawing Interpretations 3 Credits
- ENG* 101: Composition 3 Credits (Gen Ed - Mode 2)

Subtotal: 16

- MFG* 239: Geometric Dimension and Tolerancing 3 Credits
- PHY* 121: General Physics I 4 Credits
- EGR* 230: C++ For Engineers 3 Credits
- MFG* 230: Statistical Process Control 3 Credits
- COM* 173: Public Speaking 3 Credits (Gen Ed - Mode 3)

Subtotal: 16

- MAT* 254: Calculus I 4 Credits (formerly MAT* 250) ‡
- PHY* 122: General Physics II 4 Credits
- MFG* 111: Manufacturing Materials and Process I 3 Credits
- MAT* 165: Elementary Statistics with Computer Applications 4 Credits
- Choose one course from Gen Ed - Mode 1 3 Credits

Subtotal: 18

- EGR* 211: Engineering Statics 3 Credits
- EET* 108: AC/DC Circuit Analysis 4 Credits
- MFG* 112: Manufacturing Materials and Process II 3 Credits
- CAD* 110: Introduction to CAD 3 Credits
- PSY* 247: Industrial and Organizational Psychology 3 Credits (Gen Ed - Mode 6)

Subtotal: 16

Total Credits Required: 66

Note:

‡ Students who receive credit for MAT* 250 have fulfilled the MAT* 254 requirement.
Marketing, A.S.

Program Design

The Marketing associate degree program is for students who wish to enter managerial or proprietary positions in marketing. To complete this program, students will take courses in marketing, business, accounting and general education. Students interested in transferring to earn a bachelor’s degree should enroll in the Accounting and Business Administration Transfer Program. Note: Students should meet with a faculty advisor to plan their program of study.

Curriculum

We recommend that students have a sound foundation in mathematics before entering this program. We recommend that all students take the assessment test early to determine their mathematical level. Students must achieve at least a C or better in all accounting courses to continue onto the next level. Note: all business courses numbered 100 or higher require that students must be eligible for ENG* 101, with the exception of BBG* 101. Students are strongly advised to follow the suggested order of courses in the program whenever possible.

Learning Outcomes

Upon successful completion of all Marketing degree program requirements, graduates will
1. Demonstrate relevant content knowledge in required core business disciplines (accounting, business law, management and organizational behavior, and marketing) and apply concepts in problem solving through identifying and evaluating alternative solutions and offering a well-supported conclusion.
2. Recognize proper business acumen and decorum in professional interactions; demonstrate appropriate interpersonal communication and presentation skills and demeanor; demonstrate the ability to use presentation and team interpersonal skills effectively in class presentations.
3. Demonstrate the ability to identify situations that present ethical dilemmas and lapses and understand and apply the concepts related to ethics and the social responsibilities of businesses in order to respond thoughtfully.
4. Apply concepts in core accounting and business disciplines and demonstrate critical thinking skills to make sound business decisions.
5. Demonstrate an understanding of the interrelationships between accounting and business courses.
6. Demonstrate the ability to effectively present marketing and promotion plans and to make an effective sales presentation, all of which reflect an understanding of the target audience, environmental factors, and sound strategic decisions based on thorough research and an understanding of marketing and other business-related principles.

In addition, the graduate will complete the comprehensive learning outcomes identified with the General Education Core.
Marketing Requirements

- ACC* 115: Financial Accounting 4 Credits
- COM* 173: Public Speaking 3 Credits (Gen Ed - Mode 3)
- BBG* 101: Introduction to Business 3 Credits
- ENG* 101: Composition 3 Credits (Gen Ed - Mode 2)
- BBG* 108: Business & Consumer Finance 3 Credits (formerly QM 110) ‡

**Subtotal: 16**

- ACC* 118: Managerial Accounting 4 Credits
- BMG* 202: Principles of Management 3 Credits
- PSY* 111: General Psychology I 3 Credits (Gen Ed - Mode 6)
- Choose one course from Gen Ed - Mode 4 3 Credits ‡‡
- ECN* 101: Principles of Macroeconomics 3 Credits or
- ECN* 102: Principles of Microeconomics 3 Credits (Gen Ed - Mode 6)

**Subtotal: 16**

- BMK* 201: Principles of Marketing 3 Credits
- BMG* 204: Managerial Communication 3 Credits
- BBG* 234: Legal Environment of Business 3 Credits
- BMK* 220: Sales 3 Credits
- Choose one course from Gen Ed - Mode 1 3 Credits ‡‡‡

**Subtotal: 15**

- Choose one course from Gen Ed - Mode 5 3-4 Credits ‡‡‡‡
- Select four elective courses from list below ‡‡‡‡‡

**Subtotal: 15-17**

Total Credits Required: 62-64

Note:

Any students planning to transfer to other colleges should meet with an MCC academic advisor or faculty advisor and consult the admissions requirements at their chosen transfer institution to plan their program of study.

‡ Students who receive credit for QM 110 have fulfilled the BBG* 108 requirement.

‡‡ Recommend MAT* 138 or higher.

‡‡‡ ART* 101, ART* 102, MUS* 101, MUS* 102, and ART* 206 are recommended by most baccalaureate institutions for Mode 1.

‡‡‡‡ A four-credit laboratory science is recommended by most baccalaureate institutions for Mode 5.

Electives:

Select one of the following courses:

- BMK* 241: Principles of Advertising 3 Credits or
- BMK* 245: Integrated Marketing Communications 3 Credits or
- COM* 201: Introduction to Public Relations 3 Credits

Select three courses from the following:

- BBG* 236: Commercial Law 3 Credits
- BBG* 295: Co-op Work Experience I 3 Credits
- BES* 218: Entrepreneurship 3 Credits
- BFN* 202: Corporate Finance 4 Credits
- CST* 201: Introduction to MIS 3 Credits
- DGA* 111: Introduction to Computer Graphics 3 Credits or
- DGA* 240: Web Page Design 3 Credits
- ECN* 101: Principles of Macroeconomics 3 Credits or
- ECN* 102: Principles of Microeconomics 3 Credits (If not already taken)
- MAT* 165: Elementary Statistics with Computer Applications 4 Credits (If not already taken)
Multimedia Studies, A.A.

Program Design

The purpose of the Multimedia Studies associate degree program is:

- to provide a multimedia transfer program in the area of digital design with an emphasis on the computer as a tool for the creation of animated and interactive presentation;
- to offer a degree program for those considering an entry level position in fields related to digital composition (animation, interactive programming, digital illustration, three-dimensional modelling, digital video production);
- to provide greater technical knowledge of the creative visual arts as they apply to multimedia design and production.

The course of study demands students’ time and dedication, and will provide them with transfer and career choices based upon ability and achievement.

The program is structured to equip students with a sound foundation in technical skills, design concepts, aesthetics, terminology and vocabulary and to provide awareness of the application of creative and critical thinking in the use of technical knowledge. A strong emphasis has been placed on the use of the computer as a production and composing tool.

Learning Outcomes

Upon successful completion of all Multimedia Studies degree program requirements, graduates will

1. Demonstrate practical skills in computer-based multimedia production including animation, 3-D modelling, digital video, and interactive design and production.
2. Demonstrate an ability to plan multimedia and interactive projects and produce all the elements involved in such projects (graphics, sound, animations and video).
3. Demonstrate an awareness of a variety of software used in multimedia production and the ways that this software can be integrated in the development of projects.
4. Use their training to pursue employment in digital media development including, but not limited to, digital animation, 3-D modeling, digital sound engineering, digital video production and editing, CD-ROM and computer game development, digital graphic arts and special effects production.

In addition, the graduate will complete the comprehensive learning outcomes identified with the General Education Core.
Multimedia Studies Requirements

- ENG* 101: Composition 3 Credits
- History Elective 3 Credits †
- ART* 121: Two-Dimensional Design 3 Credits
- DGA* 111: Introduction to Computer Graphics 3 Credits
- COM* 166: Video/Filmmaking 3 Credits or
- COM* 240: Broadcast/TV Production 4 Credits
  Subtotal: 15-16

- ENG* 110: Introduction to Literature 3 Credits (Gen Ed - Mode 3)
- Choose one course from Gen Ed - Mode 4 3 Credits
- DGA* 212: Advanced Computer Graphics 3 Credits
- DGA* 261: Computer Animation 3 Credits
- Choose one course from Gen Ed - Mode 6 3 Credits
- ART* 103: Art History III 3 Credits or
- ART* 104: Contemporary Art History 3 Credits
  Subtotal: 18

- DGA* 262: Computer Animation II 3 Credits or
- DGA* 274: Game Design with Flash 3 Credits
- DGA* 271: 3-D Computer Modeling I 3 Credits
- DGA* 240: Web Page Design 3 Credits
- Choose one course from Gen Ed - Mode 3 3 Credits
  Subtotal: 12

- DGA* 287: Digital Short Films 3 Credits
- Choose one course from Gen Ed - Mode 5 3-4 Credits
- Computer studio elective 3 Credits ‡‡
- Computer studio elective 3 Credits ‡‡
- DGA* 244: Advanced Web Design 3 Credits
  Subtotal: 15-16

**Total Credits Required: 60-62**

**Note:**

† History elective: choose from any of the history choices: HIS* 101, HIS* 102, HIS* 121, HIS* 122, HIS* 201 or HIS* 202

‡‡ Computer studio electives include:

- DGA* 214: Advanced Computer Graphics II 3 Credits
- DGA* 216: Advanced Computer Graphics III 3 Credits
- DGA* 274: Game Design with Flash 3 Credits
- DGA* 224: Digital Painting 3 Credits
- DGA* 265: Character Animation 3 Credits
- DGA* 275: Game Level Design 3 Credits
- DGA* 276: 3D Animation and Rigging 3 Credits
- ART* 250: Digital Photography 3 Credits
- ART* 281: Digital Photography II 3 Credits
Music Studies, A.A.

Program Design

The Music Studies associate degree program provides students with the knowledge and skills required for direct employment in music-related careers or with a transfer-oriented course of study towards a baccalaureate degree in music education, music business, music technology or music performance.

Courses in the music curriculum offer a thorough preparation in music fundamentals, jazz and popular theory, history (classical, contemporary and jazz) and performance. Individualized study with professional instrumental and vocal instructors is an important part of the curriculum. Each student plans his/her selection of courses with a member of the music faculty.

Curriculum

Music students must complete the following curriculum to earn an associate degree. Students may enroll full- or part-time.

Learning Outcomes

Upon successful completion of Music Studies degree program requirements, graduates will

1. Demonstrate a historical/cross-cultural awareness and appreciation of Western European and American contemporary music.
2. Demonstrate skills and techniques that reflect an understanding of the theoretical aspect of music, including: an understanding of music fundamentals; exploration and development of voice leading principles; ear training, sight singing, rhythmic, melodic and harmonic dictation; keyboards skills and accompaniment techniques.
3. Demonstrate an ability to perform solo music selections and within a music ensemble group (i.e., chorale, madrigal, chamber, jazz).
4. Demonstrate technical facility and knowledge on specified instrument or voice (i.e., soprano, alto, piano, saxophone).

In addition, the graduate will complete the comprehensive learning outcomes identified with the General Education Core.
Music Studies Requirements

- MUS* 161: Chorale I 2 Credits † or
- MUS* 158: Chamber Music/Jazz Ensemble I 2 Credits †
- ENG* 101: Composition 3 Credits (Gen Ed - Mode 2)
- MUS* 101: Music History and Appreciation I 3 Credits
- MUS* 185: Applied Lessons I 1 Credits
- MUS* 111: Fundamentals of Music I 3 Credits ‡‡
- Choose any General Education course 3 Credits

Subtotal: 15

- ENG* 110: Introduction to Literature 3 Credits or
- ENG* 200: Advanced Composition 3 Credits
- MUS* 102: Music History and Appreciation II 3 Credits or
- MUS* 124: Music of the Classical Period 3 Credits
- MUS* 162: Chorale II 2 Credits † or
- MUS* 159: Chamber Music/Jazz Ensemble II 2 Credits ‡
- MUS* 186: Applied Lessons III 1 Credits
- MUS* 215: Music Harmony 4 Credits ‡‡
- Choose any General Education course 3 Credits

Subtotal: 16

- Choose one course from Gen Ed - Mode 4 3 Credits
- Choose one course from Gen Ed - Mode 5 3-4 Credits
- MUS* 270: Chorale III 2 Credits † or
- MUS* 258: Chamber Music/Jazz Ensemble III 2 Credits ‡
- MUS* 217: Music Ear Training 3 Credits
- MUS* 285: Applied Lessons III 1 Credits
- Choose any General Education course 3 Credits

Subtotal: 15-16

- Choose one course from Gen Ed - Mode 3 3 Credits
- Choose one course from Gen Ed - Mode 6 3 Credits
- MUS* 271: Chorale IV 2 Credits † or
- MUS* 259: Chamber Music/Jazz Ensemble IV 2 Credits ‡
- MUS* 286: Applied Lessons IV 1 Credits
- Music elective 3 Credits ‡‡‡
- Choose any General Education course 3 Credits

Subtotal: 15

Total Credits Required: 61-62

† Voice students should choose chorus sequence MUS* 161, MUS* 162, MUS* 270 and MUS* 271. Instrumental students should choose instrumental sequence MUS* 158, MUS* 159, MUS* 258 and MUS* 259.
‡‡ Students who have not studied the piano or are not knowledgeable of the piano keyboard are strongly encouraged to enroll in a beginning piano class (MUS* 148: Beginning Piano) or take piano lessons before taking the theory sequence (MUS* 111 and MUS* 215).
‡‡‡ Music Elective List:
- MUS* 107: Today's Music 3 Credits
- MUS* 108: Today's Music Gospel, Ragtime, Blues, Jazz 3 Credits
- MUS* 151: Class Piano II 3 Credits
- MUS* 216: Contemporary Music Theory and Application 3 Credits
- MUS* 217: Music Ear Training 3 Credits
- MUS* 218: Electronic Music Composition I 3 Credits
- MUS* 219: Electronic Music Composition II 3 Credits
- MUS* 277: Vocal: Opera to Broadway 3 Credits
Occupational Therapy Assistant, A.S.

Program Design
The Occupational Therapy Assistant associate degree program enables the graduate to treat patients who are impaired by a physical illness or injury, an emotional disorder, a developmental disability or the aging process. Working under the supervision of an occupational therapist, an occupational therapy assistant uses activities and modalities as treatment to help people gain optimal function in their everyday life tasks. Specific services that an occupational therapy assistant provides may include training in activities of daily living, fabrication of splints, adapting home and work environments and tools, and therapeutic use of crafts and games.

Scholastic Preparation and Admission Process
If you are a high school graduate or hold a state equivalency certificate, you may submit an official application to the Admissions office. Admission to a Health Careers Program requires a separate application. You may request this application by contacting the Admissions office or by calling 860-512-3210 or by contacting the Mathematics, Science and Health Careers division at 860-512-2704.
To qualify for admission to the Occupational Therapy Assistant Program, students must have a grade point average at or above 2.5., be eligible for ENG* 101, MAT* 109, and have taken a college level biology course. Interested students are required to attend an informational session about the OTA Program. The OTA program coordinator may be reached by email at mmoriarty@mcc.commnet.edu or 860-512-2719.

Curriculum
Because of the flexible nature of the program, students may select an accelerated, a full-time or a part-time plan of study. Courses with an OTA designator are offered only during the day. Students with prior college credit may complete the program in a three-semester sequence. All course work must be completed with a grade of C or better and a GPA of 2.5 must be maintained throughout the program. The clinical semester, which is offered both semesters, provides a four-month, full-time, supervised learning experience with a focus on psychosocial, physical and developmental areas of practice. Students must complete the clinical semester within 18 months of the completion of academic work. Due to standards set by the Joint Commission on Accreditation of Healthcare Organizations (JCAHO), students are advised that the fieldwork sites to which they are assigned for clinical rotations, as well as state regulations, may require that they submit to a criminal background check before beginning their clinical experiences. Manchester Community College cannot be responsible for finding an alternate clinical placement for a student who fails to pass the background check. A student who is unable to complete the required clinical experience will be unable to complete the requirements for the associate degree in Occupational Therapy Assistant but may be able to apply some or all of the credits completed to an associate degree in General Studies. Students are advised to meet with an MCC counselor to discuss degree completion requirements.
Accreditation
The Occupational Therapy Assistant program is accredited by the Accreditation Council for Occupational Therapy Education (ACOTE). They can be contacted at ACOTE c/o Accreditation Dept. American Occupational Therapy Association (AOTA) which is located at 4720 Montgomery Lane, Suite 200, Bethesda, MD 20824-3449. The ACOTE website is http://www.acoteonline.org. Graduates of the program will be eligible to sit for the national certification examination for the occupational therapy assistant, administered by the National Board for Certification in Occupational Therapy (NBCOT). After successful completion of this exam, the individual will be a Certified Occupational Therapy Assistant (COTA). In addition, Connecticut, as well as most states, requires licensure in order to practice. Note that a felony conviction may affect a graduate's ability to sit for the NBCOT certification examination or attain state licensure.

NBCOT Certification Results
For the three most recent calendar years (2010, 2011, and 2012) the performance of the graduates of the occupational therapy assistant program at Manchester Community College, on the national certification exam, was as follows:
- Total number of graduates: 46
- Total number of first-time test takers of the NBCOT certification exam: 45
- Total number first-time test takers who passed the NBCOT certification exam: 45
- First time test taker percentage pass rate: 100%

Learning Outcomes
Upon successful completion of all Occupational Therapy Assistant degree program requirements, graduates will
1. Sit for the national certification exam.
2. Demonstrate the clinical skills required for working as an Occupational Therapy Assistant.
3. Demonstrate the interpersonal skills necessary to function as a Certified Occupational Therapy Assistant.
4. Comprehend the scope of occupational therapy practice.
5. Apply principles in analysis and application of occupational therapy treatment in the spectrum of human occupation.

In addition, the graduate will complete the comprehensive learning outcomes identified with the General Education Core.
Occupational Therapy Assistant Requirements

- OTA* 102: Foundation of Occupational Therapy 3 Credits
- OTA* 120: Neurologic Intervention in Occupational Therapy 4 Credits
- ENG* 101: Composition 3 Credits (Gen Ed - Mode 2)
- BIO* 115: Human Biology 4 Credits (Gen Ed - Mode 5)
- PSY* 201: Life Span Development 3 Credits (Gen Ed - Mode 6) ‡

**Subtotal: 17**

- OTA* 208: Healthcare Management in Occupational Therapy 3 Credits
- OTA* 210: Occupational Therapy Practice in Pediatrics 3 Credits
- OTA* 210L: Occupational Therapy Practice in Pediatrics Lab 1 Credits
- OTA* 216: Occupational Therapy Practice in Physical Dysfunction 3 Credits
- OTA* 216L: Occupational Therapy Practice in Physical Dysfunction Lab 1 Credits
- OTA* 218: Occupational Therapy Practice in Mental Heath 3 Credits
- OTA* 218L: Occupational Therapy Practice in Mental Heath Lab 3 Credits
- OTA* 206: Level I Advanced Fieldwork 0 Credits

**Subtotal: 15**

- OTA* 234: Documentation in Occupational Therapy 3 Credits
- MAT* 109: Quantitative Literacy 3 Credits (Gen Ed - Mode 4)
- ANT* 118: Health, Healing and Culture. 3 Credits (Gen Ed - Mode 6)
- COM* 173: Public Speaking 3 Credits (Gen Ed - Mode 3)
- Elective fine arts 3 Credits
- Elective computer 2-3 Credits

**Subtotal: 17-18**

- OTA* 242: Level II Fieldwork 11 Credits
- OTA* 244: Clinical Seminar in Occupational Therapy 1 Credits

**Subtotal: 12**

Total Credits Required: 61-62

**Professional-Level Occupational Therapy Program**

These courses are recommended for students who plan to transfer to a professional-level occupational therapy program.

- BIO* 211: Anatomy and Physiology I 4 Credits
- BIO* 212: Anatomy and Physiology II 4 Credits
- MAT* 165: Elementary Statistics with Computer Applications 4 Credits
- CSC* 101: Introduction to Computers 3 Credits

**Note:**
‡ Must have been taken within last five years.
Paralegal, A.S.

Program Design
A paralegal or legal assistant is a person—qualified through education, training or work experience—who is employed or retained by a lawyer, law office, governmental agency or other entity. The paralegal performs specifically delegated, substantive legal work for which a lawyer is responsible. Paralegals may not provide legal services directly to the public except as permitted by law.

Paralegals may be asked to conduct research and prepare memoranda; to draft pleadings, deeds or contracts; to interview clients or witnesses; to prepare answers to interrogatories; or to digest depositions. They may prepare inventories, accounts and tax returns in connection with estates and trusts; perform real estate title searches and UCC searches; calendar and track important deadlines; or organize and maintain client files. Paralegals may not give legal advice or engage in the unauthorized practice of law.

The Paralegal associate degree program includes specialized courses in the paralegal profession as well as related courses in business and liberal arts. An option in the program is a cooperative education/work experience course in which students gain practical experience in a legal setting while earning academic credit. The Paralegal program has been approved by the American Bar Association since 1984. It is a member of the American Association for Paralegal Education.

The MCC Paralegal Association is an active student club that offers networking opportunities and guest speakers for its members.

Curriculum
The Paralegal program is primarily an evening program of study, offering legal courses during the academic year. Many students work full-time while attending classes at night. Students should note that not all courses are offered every semester, and only some courses are offered in the day. Part-time students should see a counselor for suggested course sequencing.

Note: Course prerequisites are listed in the course descriptions.

Learning Outcomes
Upon successful completion of all Paralegal degree program requirements, graduates will

1. Recognize and describe the proper role of the paralegal in the delivery of legal services to the public and apply the ethical rules that govern the conduct of the legal profession.
2. Demonstrate critical thinking, reasoning and analytical skills, conduct factual and legal research using print and computerized methods, and organize and present information effectively, both orally and in writing.
3. Describe the organization of the American legal system, apply procedural law to litigation and administrative agency law, and demonstrate substantive knowledge of principles of law.
4. Draft and interpret legal documents, including pleadings, deeds, mortgages, probate documents, court forms, business documents, and contracts for review by the supervising attorney.
5. Perform file and case management tasks in accordance with office policy and court procedures, using problem-solving, organizational and computer skills.
6. Recognize opportunities for professional development through continuing education and affiliation with professional organizations.

In addition, the graduate will complete the comprehensive learning outcomes identified with the General Education Core.
Paralegal Requirements

- POL* 120: Introduction to Law 3 Credits
- LGL* 103: Legal Ethics and Professional Responsibility 1 Credits
- ENG* 101: Composition 3 Credits (Gen Ed - Mode 2)
- Choose any course 3 Credits
- BBG* 231: Business Law I or
  BBG* 234: Legal Environment of Business 3 Credits
- POL* 111: American Government 3 Credits or
  POL* 112: State and Local Government 3 Credits
  **Subtotal: 16**
- LGL* 102: Legal Research and Writing 3 Credits
- LGL* 208: Litigation 3 Credits
- Choose one course from Gen Ed - Mode 3 3 Credits
- Choose one course from Gen Ed - Mode 4 3 Credits
- ACC* 115: Financial Accounting 4 Credits
  **Subtotal: 16**
- Legal elective 3 Credits
- LGL* 209: Probate Practice 3 Credits
- LGL* 220: Computer Applications in Law 4 Credits
- Choose one course from Gen Ed - Mode 6 3 Credits
- Choose one course from Gen Ed - Mode 5 3-4 Credits
- Legal elective 3 Credits
- LGL* 240: Legal Studies Capstone Course 3 Credits
  **Subtotal: 15-16**

Total Credits Required: 63-64

Note:

† Legal Electives
- LGL* 210: Family Law
- LGL* 212: Commercial Law
- LGL* 215: Environmental Law
- LGL* 216: Administrative Law
- LGL* 270: Cooperative Education/Work Experience

‡ Students without a strong foundation in computer skills should take CSC* 101 or BOT* 230 prior to enrolling in LGL* 220.
Pathway to Teaching Careers, A.A.

Program Design

The Pathway to Teaching Careers associate degree program was developed in response to the state of Connecticut’s need for new teachers in shortage areas. The Pathway to Teaching Careers program will transfer to Eastern Connecticut State University. Students who successfully complete this program with a cumulative grade point average of 2.8 or higher, earn the associate degree, and pass the Praxis I examination will be considered for admission to the baccalaureate program at ECSU on an equal basis with native students at ECSU. Students interested in transferring to schools of education at other colleges should meet with an advisor to ensure that the proper courses are taken for transfer. Students include individuals interested in a career as a teacher including those currently working as paraprofessionals, high school graduates, and individuals seeking a career change.

Curriculum

The Pathway to Teaching Careers program is the basis for the first two years of undergraduate work at Eastern Connecticut State University. Students may enroll in this program full- or part-time, during the day or in the evening. Students must seek the advice of a transfer counselor to ensure that they meet all requirements of the program and the state with regard to becoming a teacher in Connecticut. This program is for students who are interested in teaching students in elementary or secondary school. Students who are interested in teaching preschool age children or children in kindergarten, first, second, or third grades should follow the Early Childhood Education Program.

Learning Outcomes

Upon successful completion of all Pathway to Teaching Careers degree requirements, graduates will

1. Describe the role of the teacher in the classroom.
2. Demonstrate an understanding of the requirements for earning teacher certification based on academic program requirements and state certification requirements.
3. Demonstrate the ability to think critically, evaluate information and sources, use that information ethically, and write clearly and effectively.
4. Demonstrate the ability to work within a group effectively.

In addition, the graduate will complete the comprehensive learning outcomes identified with the General Education Component.
Pathways to Teaching Requirements

- ENG* 101: Composition 3 Credits Gen Ed - Mode 2
- PSY* 111: General Psychology I 3 Credits Gen Ed - Mode 6
- COM* 173: Public Speaking 3 Credits Gen Ed - Mode 3
- EDU* 104: Pathways to Education 1 Credits
- Choose one Gen Ed - Mode 1 course 3 Credits
- Choose any Content Major course 3-4 Credits
**Subtotal: 16-17 credits**

- ENG* 110: Introduction to Literature 3 Credits
- SOC* 101: Principles of Sociology 3 Credits
- Choose any Content Major course 3 Credits
- Choose any Content Major course 3 Credits
**Subtotal: 15-17 credits**

- EAS* 102: Earth Science 3 Credits or
- EVS* 100: Introduction to Environmental Science 3 Credits or
- EVS* 130: Sustainable Energy and the Environment 3 Credits
- HIS* 201: United States History I 3 Credits or
- HIS* 202: United States History II 3 Credits
- FRE* 111: Elementary French I 4 Credits or
- SPA* 111: Elementary Spanish I 4 Credits or
- Choose any Content Major course 3 Credits
- PSY* 203: Child Development 3 Credits or
- PSY* 206: Adolescent & Adult Development 3 Credits
- Choose any General Education course 3 credits
**Subtotal: 15-16 credits**

- BIO* 115: Human Biology 4 Credits
- HLT* 151: Health and Wellness Promotion 3 Credits
- EDU* 110: Teaching in the Twenty-First Century 3 Credits or
- PSY* 201: Life Span Development 3 Credits or
- PSY* 220: Educational Psychology 3 Credits
- FRE* 112: Elementary French II 4 Credits or
- SPA* 112: Elementary Spanish II 4 Credits
- HIS* 101: Western Civilization I 3 Credits or
- HIS* 102: Western Civilization II 3 Credits
**Subtotal: 16 credits**

Total Credits Required: 62-66

Notes: Students with two years of a high school foreign language are exempt from the language requirement. Teacher candidates in Connecticut must have an academic or content major other than education to be eligible for teacher certification. Please contact the Social Science & Hospitality Division at 860-512-2753 to locate faculty advisors in this program.
Photography Option, Visual Fine Arts, A.A.

Program Design

The Photography Option, Visual Fine Arts associate degree program provides students with a series of courses that introduces fundamental photographic concepts and techniques and the necessary skills to transfer to the institution of their choice or succeed in an entry-level photography position. The cornerstone to the Photography Option is a portfolio that can be used for transfer to a vocational training program, art school or baccalaureate photography program, or for use as part of the job search process.

Curriculum

Students may enroll in this program full or part-time.

Learning Outcomes

Upon successful completion of the Photography Option, Visual Fine Arts degree program requirements, graduates will
1. Demonstrate an understanding of terminology, concepts and techniques relating to photography.
2. Demonstrate the ability to use a camera’s creative controls to manifest intent.
3. Demonstrate proficiency at traditional silver darkroom techniques including 35mm and medium format film processing and printing.
4. Demonstrate proficiency at digital image capture, editing and output with an emphasis on developing up-to-date Adobe Photoshop skills.
5. Be able to use a variety of situation-specific natural and studio lighting techniques.
6. Make informed and meaningful aesthetic decisions, with an emphasis on critical thinking and problem solving.
7. Develop an appreciation of the many vocational and creative applications of the medium and an understanding of its cultural, historical and contemporary context.
8. Be able to articulate and explain the decisions made as part of the image production process.
9. Develop an exhibition-quality portfolio that can be used for transfer to a college or university offering a bachelor’s degree in art and/or photography or for use by those seeking immediate employment in a variety of entry-level positions in the field of photography.

In addition, the graduate will complete the comprehensive learning outcomes identified with the General Education Core.
Photography Option Requirements

- ENG* 101: Composition 3 Credits (Gen Ed - Mode 2)
- ART* 141: Photography I 3 Credits
- ART* 121: Two-Dimensional Design 3 Credits
- Choose any ANT*, ECN*, GEO*, HIS*, POL*, SOC* or SSC* course 3 Credits
- ART* 103: Art History III 3 Credits or
- ART* 104: Contemporary Art History 3 Credits
  **Subtotal: 15**

- ENG* 110: Introduction to Literature 3 Credits (Gen Ed - Mode 3)
- ART* 122: Three-Dimensional Design 3 Credits
- ART* 142: Photography II 3 Credits
- Choose one course from Gen Ed - Mode 5 3 Credits
- ART* 101: Art History I 3 Credits or
  Studio course elective 3 Credits
- ART* 111: Drawing I 3 Credits or
- ART* 113: Figure drawing I 3 Credits
  **Subtotal: 18**

- ART* 102: Art History II: Renaissance to the Present 3 Credits or
  Studio course elective 3 Credits
- ART* 250: Digital Photography 3 Credits
- Studio course elective 3 Credits
- Liberal arts and science elective 3 Credits
- Choose one course from Gen Ed - Mode 6 3 Credits
  **Subtotal: 15**

- ART* 281: Digital Photography II 3 Credits
- Studio course elective 3 Credits
- Gen Ed - Mode 1 3 Credits
- Studio course elective 3 Credits
- MAT* 109: Quantitative Literacy 3 Credits (Gen Ed - Mode 4)
  **Subtotal: 15**

**Total Credits Required: 63**

**Note:** ‡Any 6-hour ART*, DGA*, or GRA* studio course. Recommended studio courses include:

- ART* 151: Painting I
- ART* 131: Sculpture I
- ART* 167: Printmaking I
- ART* 161: Ceramics I
- ART* 242: Photography III

‡‡Recommended Mode 1: ART* 283: Photojournalism
Physical Therapist Assistant, A.S.

Program Design
The Physical Therapist Assistant (PTA) associate degree program prepares students to function in healthcare settings as an entry level practitioner within the boundaries and scope of practice of a physical therapist assistant and under the supervision of a physical therapist. PTAs practice in hospitals, school systems, private offices, home health agencies, industry, rehabilitation hospitals and nursing homes. The program is offered through a collaborative arrangement between Capital Community College, Housatonic Community College, Manchester Community College, Naugatuck Valley Community College, Northwestern Connecticut Community College and Tunxis Community College. The A.S. degree is awarded by Manchester Community College. The two-year course of study begins in January and includes a minimum of 63 credits in science, mathematics, psychology, social sciences and humanities. Eight physical therapy courses, which have a strong foundation in the sciences and in professional practice standards, are also required. Twelve credits are earned during the final semester in clinical practicums. These are done in physical therapy clinics that are affiliated with this PTA program. Due to standards set by the Joint Commission on Accreditation of Healthcare Organizations (JCAHO), students are advised that the healthcare facilities to which they are assigned for clinical rotations may require that they submit to a criminal background check before beginning their clinical experiences. Manchester Community College cannot be responsible for finding an alternate clinical placement for a student who fails to pass the background check. A student who is unable to complete the required clinical experience will be unable to complete the requirements for the associate degree in Physical Therapist Assistant but may be able to apply some or all of the credits completed to an associate degree in General Studies. Students are advised to meet with an MCC counselor to discuss degree completion requirements. All physical therapy classes are held during the day at Naugatuck Valley Community College in Waterbury and the clinical practicums require 40 hours of attendance weekly throughout that semester. Non-professional courses will be taken at Manchester Community College.

Scholastic Preparation and Admissions Process
The PTA program relies on a selective admissions process that uses specific admissions criteria. These criteria are available through the admissions office in each college and include course work in algebra, chemistry or physics, and college level anatomy and physiology. Interested candidates will be expected to have a history of academic success, particularly with science courses. The student will need to demonstrate the skills necessary to become a PTA. The deadline for application is October 15 and classes begin in January each year. For more information about admission into this program, contact the Mathematics, Science and Health Careers division office at 860-512-2700.

Accreditation
One requirement for registration or licensure to work as a PTA is graduation from a program of education accredited by the Commission on Accreditation in Physical Therapy Education of the American Physical Therapy Association. The Physical Therapist Assistant program is accredited by Connecticut’s Board of Governors for Higher Education and by the Commission on Accreditation in Physical Therapy Education/APTA, 1111 North Fairfax St., Alexandria, VA, 22314-1478, 703-684-2782.

Learning Outcomes
Upon successful completion of all Physical Therapist Assistant program requirements, graduates will
1. Sit for examination for state licensure/registration as a physical therapist assistant.
2. Perform physical therapy interventions under the supervision of a physical therapist.
3. Accurately obtain patient information through data collection.
4. Demonstrate accurate problem-solving abilities when working as a physical therapist assistant.
5. Competently communicate with physical therapists, patients, families and other healthcare providers.
6. Effectively provide education to patients, families and other caregivers.
7. Produce documentation supporting physical therapy services.
8. Demonstrate behaviors that comply with appropriate statutes and with the ethical standards established by the American Physical Therapy Association.
9. Competently function within an interdisciplinary healthcare team.

In addition, the graduate will complete the comprehensive learning outcomes identified with the General Education Core.
Physical Therapist Assistant Requirements

- BIO* 212: Anatomy and Physiology II 4 Credits
- ENG* 101: Composition 3 Credits
- PSY* 111: General Psychology I 3 Credits
- PTA* 120: Introduction to Physical Therapy 3 Credits
- PTA* 125: Physical Therapy for Function 4 Credits

**Subtotal: 17**

- PTA* 220: Introduction to the Physical Therapy Clinic 1 Credits

**Subtotal: 1**

- COM* 173: Public Speaking 3 Credits
- ENG* 110: Introduction to Literature 3 Credits
- Choose one course from Gen Ed - Mode 4 3 Credits
- PTA* 230: Physical Agents in Physical Therapy 4 Credits
- PTA* 235: Kinesiology For Rehabilitation 4 Credits

**Subtotal: 17-18**

- Choose any ANT*, ECN*, GEO*, HIS*, POL*, PSY*, SOC* or SSC* course 3 Credits
- Choose one course from Gen Ed - Mode 1 3 Credits
- PTA* 250: Therapeutic Exercise 5 Credits
- PTA* 253: Pathophysiology for Rehabilitation 3 Credits
- PTA* 258: PTA in the Healthcare Arena 2 Credits

**Subtotal: 16**

- PTA* 260: Physical Therapy Seminar 2 Credits
- PTA* 262: PTA Internship II 5 Credits
- PTA* 265: PTA Internship III 5 Credits

**Subtotal: 12**

Total Credits Required: 63-64
Respiratory Care, A.S.

Program Design The Respiratory Care associate degree program provides training in respiratory care, a healthcare specialty that concentrates on the areas of prevention, treatment, management and rehabilitation of people with lung disorders. Respiratory therapists are involved in a variety of life-saving situations, working side-by-side with nurses, doctors and other healthcare providers and treating patients ranging in age from the newborn to the elderly. Using sophisticated equipment, therapists help people with such diseases as asthma, bronchitis and emphysema. Respiratory therapists are regarded as experts on the respiratory and cardiac systems and are often called upon for advice and help in deciding which course of care to prescribe.

Scholastic Preparation and Admission Process The Respiratory Care program relies on a selective admission process, which uses specific admissions criteria. These criteria are available through the Mathematics, Science and Health Careers division office. The admission criteria require that the students are eligible for the equivalent of MAT* 109, ENG* 101 and BIO* 211. Interested candidates will be expected to have a history of academic success, with the completion of a lab science course. Admission to the Respiratory Care program requires a separate application. Complete information on specific criteria for acceptance and the admission process is available from the Mathematics, Science and Health Careers division office at 860-512-2704. A tour of one of the hospital affiliates is strongly recommended. Students will need to demonstrate the skills necessary to become a Respiratory Therapist; technical standards for the program are available upon request.

Accreditation The program is accredited by the Committee on Accreditation for Respiratory Care. For information write to: Committee on Accreditation for Respiratory Care, 1248 Harwood Road, Bedford, Texas 76021-4244 or phone 817-283-2835 or www.coarc.com. Division of Mathematics, Science and Health Careers: 860-512-2700

Curriculum The program begins each September and continues through two years, including the summer semester. Classes with an RSP* designation and clinical experience are offered during the day. Beginning with the second semester of the program, students will train at the hospitals every week in conjunction with classes held at the college. Beginning with the second year, the clinical component requires full-time study. Hospital affiliates include Professional Homecare, Hartford Hospital, Hospital of Central Connecticut, the Hospital for Special Care, Manchester Memorial Hospital, Gaylord Hospital, St. Francis Hospital and Medical Center, University of Connecticut Health Center and Yale New Haven Hospital. All hospital training is supervised by trained clinical instructors. Due to standards set by the Joint Commission on Accreditation of Healthcare Organizations (JCAHO), students are advised that the healthcare facilities to which they are assigned for clinical rotations may require that they submit to a criminal background check before beginning their clinical experiences. Manchester Community College cannot be responsible for finding an alternate clinical placement for a student who fails to pass the background check. A student who is unable to complete the required clinical experience will be unable to complete the requirements for the associate degree in Respiratory Care but may be able to apply some or all of the credits completed to an associate degree in General Studies. Students are advised to meet with an MCC Counselor to discuss degree completion requirements. After graduating from the program, students are eligible to take the entry level examination offered by the National Board for Respiratory Care (NBRC). A physical examination and an immunization record are required of all students prior to beginning clinical rotations. Students are responsible for hospital parking fees; uniforms; clinical supplies, e.g. stethoscopes; assessment examination and miscellaneous expenses.

Learning Outcomes

Upon successful completion of all Respiratory Care degree program requirements, graduates will

1. Sit for the National Board for Respiratory Care entry-level examination for Certified Respiratory Therapist (CRT).
2. Sit for the NBRC advanced-level examination for Registered Respiratory Therapist (RRT).
3. Demonstrate the ability to comprehend, apply and evaluate information relevant to their role as an advanced level respiratory therapist.
4. Demonstrate technical proficiency in the skills necessary to fulfill the role of advanced level respiratory therapist.
5. Demonstrate professional behavior consistent with the practice of respiratory care.

In addition, the graduate will complete the comprehensive learning outcomes identified with the General Education Core.

Respiratory Care Requirements

- **BIO* 211**: Anatomy and Physiology I 4 Credits (Gen Ed - Mode 5)
- **MAT* 109**: Quantitative Literacy 3 Credits (Gen Ed - Mode 4)
- **ENG* 101**: Composition 3 Credits (Gen Ed - Mode 2)
- **RSP* 121**: Cardiopulmonary Anatomy & Physiology 3 Credits
- **RSP* 140**: Principles of Respiratory Care 3 Credits
- **RSP* 140L**: Principles of Respiratory Care Lab 1 Credits
  **Subtotal**: 17
- **BIO* 212**: Anatomy and Physiology II 4 Credits (Gen Ed - Mode 5)
- **RSP* 180**: Clinical Practicum I 1 Credits
- **RSP* 131**: Applied Pharmacology 3 Credits
- **RSP* 160**: Diagnostic & Therapy Principles 3 Credits
- **CHE* 111**: Concepts of Chemistry 4 Credits ‡
  **Subtotal**: 15
- **COM* 173**: Public Speaking 3 Credits
- **RSP* 181**: Clinical Practicum II 1 Credits
- **RSP* 260**: Advanced Principles of Ventilator Therapy 3 Credits
  **Subtotal**: 7
- Choose one course from Gen Ed - Mode 6 3 Credits

- **PHY* 110**: Introductory Physics 4 Credits or
- **PHY* 111**: Physics for Life Sciences 4 Credits

- **RSP* 281**: Advanced Clinical Practicum 2 Credits
- **RSP* 274**: Diagnostic Respiratory Care 3 Credits
- **RSP* 251**: Respiratory Pathophysiology 3 Credits
  **Subtotal**: 15
- **BIO* 235**: Microbiology 4 Credits
- Choose one course from Gen Ed - Mode 1 3 Credits
- **RSP* 282**: Advanced Clinical Practicum II 2 Credits
- **RSP* 261**: Advanced Respiratory Care II 3 Credits
- **RSP* 252**: Respiratory Pathophysiology II 2 Credits
  **Subtotal**: 14

**Total Credits Required: 68**

**Note**: Students planning to transfer to a Respiratory Care baccalaureate program are encouraged to take **CHE* 121 and CHE* 122.**
Social Service, A.S.

Program Design

The Social Service associate degree program is designed to prepare students for diverse employment opportunities and to provide a foundation for further academic pursuit. Additionally, the program includes field placement opportunities that provide students with “hands-on” exposure to the helping professions.

Curriculum

Students may enroll in this program full- or part-time. They can begin the program any semester and include field work at off-campus sites as part of their program.

Learning Outcomes

Upon successful completion of all Social Service degree program requirements, graduates will
1. Understand the past, present and future of human services.
2. Be prepared for group facilitation and participation, grant proposal writing, and oral and written expressions appropriate to human services.
3. Conduct interviews, assessments, and basic human service research.
4. Be prepared to address the needs of client populations during the internship experience.
5. Demonstrate knowledge of human service skills necessary to interact effectively with individuals, families or groups.

In addition, the graduate will complete the comprehensive learning outcomes identified with the General Education Core.
Social Service Requirements

- ENG* 101: Composition 3 Credits (Gen Ed - Mode 2)
- HSE* 101: Introduction to Human Services 3 Credits
- PSY* 111: General Psychology I 3 Credits (Gen Ed - Mode 6)
- HLT* 151: Health and Wellness Promotion 3 Credits
- Choose one course from Gen Ed - Mode 5 3-4 Credits

Subtotal: 15-16

- ENG* 200: Advanced Composition 3 Credits
- HSE* 210: Group & Interpersonal Relations 3 Credits
- HSE* 251: Work with Individuals and Families 3 Credits
- Choose one course from Gen Ed - Mode 4 3-4 Credits
- Choose any ECN*, GEO*, HIS*, POL*, PSY*, SOC* or SSC* course 3 Credits

Subtotal: 15-16

- ENG* 110: Introduction to Literature 3 Credits
- HSE* 281: Human Services Field Work I 3 Credits
- POL* 112: State and Local Government 3 Credits
- PSY* 201: Life Span Development 3 Credits
- Choose one course from Gen Ed - Mode 1 3 Credits

Subtotal: 15

- HSE* 282: Human Services Field Work II 3 Credits
- SSC* 294: Cooperative Education/Work Experience 3 Credits
- HSE* 241: Human Services Agencies and Organizations 3 Credits
- Choose any two courses 6 Credits
- ANT* 101: Introduction to Anthropology 3 Credits

Subtotal: 15

Total Credits Required: 60-62

Note:

‡ Students are to meet with the program coordinator before selecting a field placement site.
Speech-Language Pathology Assistant Option, Disability Specialist, A.S.

Program Design
The Speech-Language Pathology Assistant (SLPA) Option, Disability Specialist associate degree program is designed to prepare graduates for careers working in elementary and secondary schools with children who have communication disorders. SLPAs work under the supervision of a licensed, certified Speech-Language Pathologist. The SLPA option provides students with a specialized career path as a paraprofessional. The array of courses and programs offered in this option will help to ensure learner success in the program and will meet local and state workforce demands in a field where there is a great need for qualified staff at the assistant level. The program is designed for individuals currently working as paraprofessionals who wish to become Speech-Language Pathology Assistants, people seeking a career change, and all students interested in a career as an SLPA. The SLPA option is guided by the program philosophy and mission statement of the Disability Specialist program. Students will receive specific skill instruction to prepare them to become effective SLPAs coupled with a positive value base that will prepare them to assist individuals with disabilities toward the goals of community inclusion and participation and the attainment of their potential.

Curriculum
The SLPA option is a career program and the academic preparation is at the associate degree level. In addition to General Education and other required courses, SLPA option students will complete specialty courses including a supervised internship. Students may enroll in this program full- or part-time.

Learning Outcomes
Upon successful completion of all Speech-Language Pathology Assistant Option, Disability Specialist program degree requirements, graduates will

1. Describe the process of communication and the characteristics of effective communication.
2. Define the differences between communication disorders and communication differences.
3. Describe the stages of language and literacy development and distinguish among language delays, language disorders and culturally-based language differences.
4. Explain and differentiate among the characteristics, etiologies, and impact of phonology, voice, fluency and language disorders.
5. Explain the effect of hearing loss on the development of communication skills.
6. Describe the role of the speech language pathology assistant in supporting therapy plans for students in educational settings.

In addition, the graduate will complete the comprehensive learning outcomes identified with the General Education Core.
Speech-Language Pathology Assistant Option Requirements

- ENG* 101: Composition 3 Credits (Gen Ed - Mode 2)
- SLP* 111: Communication Development 3 Credits
- PSY* 111: General Psychology I 3 Credits (Gen Ed - Mode 6)
- PSY* 163: Children with Disabilities 3 Credits
- Choose any course 3 Credits
  **Subtotal: 15**

- Choose one course from Gen Ed - Mode 3 3 Credits
- SLP* 112: Speech and Language Services in the Educational Setting 3 Credits
- Choose one course from Gen Ed - Mode 6 3 Credits
- SLP* 120: Communication Disorders and Intervention I 3 Credits
- Choose one course from Gen Ed - Mode 5 3-4 Credits
  **Subtotal: 15-16**

- SLP* 121: Communication Disorders and Intervention II 3 Credits
- POL* 111: American Government 3 Credits or
- POL* 112: State and Local Government 3 Credits
- PSY* 183: Learning Process and Disabilities 3 Credits
- Choose one course from Gen Ed - Mode 1 3 Credits
- Choose any course 3 Credits
  **Subtotal: 15**

- ECE* 231: Early Language and Literacy Development 3 Credits
- PSY* 164: Assistive Technology for Students with Disabilities (K-12) 1 Credits
- PSY* 174: Assistive Technology for Adults in the Workplace, Home and Community. 1 Credits
- PSY* 193: Issues/Trends in Disabilities 3 Credits
- SSC* 294: Cooperative Education/Work Experience 3 Credits
- HSE* 294: Disability Specialist Seminar 1 Credits
- Choose one course from Gen Ed - Mode 4 3 Credits†
  **Subtotal: 15**

**Total Credits: 60-61**

**Note:**

† *Students planning to transfer should take MAT* 165.
Surgical Technology, A.S.

Program Design
The Surgical Technology associate degree program provides education and training in surgical technology, a healthcare specialty whose practitioners are members of a surgical team, trained to work primarily in the operating room in cooperation with surgeons and nurses. Surgical technologists prepare the OR for use, maintain a sterile environment, hand instruments to the surgeon, maintain records and assist with patient care.

The program begins each September and continues through 21 months, including a required summer session. Surgical Technology (SUR*) classes and clinical rotations are scheduled only during the day. Pre-clinical and general education courses are campus-based. Summer session and clinical courses are scheduled at area hospitals including Baystate Health System, Connecticut Children’s Medical Center, Hartford Hospital, Hospital of Central Connecticut, Manchester Memorial Hospital and University of Connecticut Medical Center. Due to standards set by the Joint Commission on Accreditation of Healthcare Organizations (JCAHO), students are advised that the healthcare facilities to which they are assigned for clinical rotations may require that they submit to a criminal background check before beginning their clinical experiences. Manchester Community College cannot be responsible for finding an alternate clinical placement for a student who fails to pass the background check. A student who is unable to complete the required clinical experience will be unable to complete the requirements for the associate degree in Surgical Technology but may be able to apply some or all of the credits completed to an associate degree in General Studies. Students are advised to meet with a counselor to discuss degree completion requirements. Graduates are prepared, eligible and encouraged to take an examination administered by the Association of Surgical Technologists to achieve the status of Certified Surgical Technologist.

Special expenses such as parking and uniforms may be required in this program.

Scholastic Preparation and Admission Process
Students seeking admission to the Surgical Technology program should have completed one biology laboratory course at the college level within the past five years and a basic college algebra course, or be exempted by placement test results. The biology course must be a prerequisite for BIO* 211. Students must be eligible for ENG* 101. Medical-related experience either through employment or volunteering is strongly recommended. Students will need to demonstrate the skills necessary to become a surgical technologist. Admission to the Surgical Technology program requires a separate application that should be filed during the academic year prior to desired admission. Students are admitted on an on-going basis until the class is filled, so early application is recommended. A packet that contains further information and the application forms is available from the Admissions office or by calling the Mathematics, Science and Health Careers Division at 860-512-2704.

Accreditation
This program is accredited by the Accreditation Review Committee on Education in Surgical Technology and the Commission on Accreditation of Allied Health Education Programs.

Curriculum
The following course sequence is recommended for students without prior college experience. The SUR* course sequence begins in the Fall and must be followed as described. Anatomy and Physiology must be successfully completed before the student begins the second-year clinical course (SUR* 222). Students must pass a practice certification examination to complete SUR* 224 and be eligible for graduation.

Learning Outcomes
Upon successful completion of all Surgical Technology degree program requirements, graduates will
1. Be prepared to serve as a member of a surgical team in providing high quality care in the operating room or other surgical environment.
2. Perform highly-specialized skills by integrating basic knowledge of surgical techniques and application of problem-solving procedures.
3. Demonstrate interpersonal skills and communicate effectively with patients and other healthcare professionals.
4. Demonstrate ability to protect patients’ rights and privacy by displaying good judgment, integrity and a professional manner.
5. Prepare for and successfully complete the examination for certification as a surgical technologist (CST).

In addition, the graduate will complete the comprehensive learning outcomes identified with the General Education Core.
Surgical Technology Requirements

- BIO* 211: Anatomy and Physiology I 4 Credits (Gen Ed - Mode 5)
- ENG* 101: Composition 3 Credits (Gen Ed - Mode 2)
- Choose any Gen Ed course 3 credits
- SUR* 101: Operating Room Procedures I 4 Credits

**Subtotal: 14**

- Choose one course from Gen Ed - Mode 4 3 Credits
- BIO* 212: Anatomy and Physiology II 4 Credits (Gen Ed - Mode 5)
- PSY* 111: General Psychology I 3 Credits (Gen Ed - Mode 6)
- SUR* 102: Operating Room Procedures II 4 Credits

**Subtotal: 14**

- SUR* 201: Seminar in Surgery 2 Credits
- SUR* 220: Clinical Experience I 2 Credits

**Subtotal: 4**

- CHE* 111: Concepts of Chemistry 4 Credits
- SUR* 221: Pathology/Pharmacology for the Surgical Technologist 3 Credits
- ENG* 110: Introduction to Literature 3 Credits (Gen Ed - Mode 3)
- SUR* 222: Clinical Experience II 4 Credits

Choose one course from
- CSA* 105: Introduction to Software Applications 3 Credits
- CSC* 101: Introduction to Computers 3 Credits

**Subtotal: 16-17**

- BIO* 235: Microbiology 4 Credits
- COM* 173: Public Speaking 3 Credits
- Choose one course from Gen Ed - Mode 1 3 Credits
- SUR* 224: Clinical Experience III 4 Credits
- SUR* 225: Advanced Seminar in Surgery 2 Credits

**Subtotal: 16**

Total Credits Required: 64-65
Technology Studies, A.S. – Electronics Technology Option

Program Design

The Connecticut College of Technology Pathways program allows students to complete an associate in science degree program in Technology Studies at MCC, and continue on to complete a bachelor of science degree in Industrial Technology, Engineering Technology, Electronic Technology, Computer-Aided Design or Technology Education at Central Connecticut State University’s (CCSU) School of Technology. The curriculum offers a broad range of studies and topics in: mathematics, physics, chemistry, engineering drawing and computer-aided design (CAD), electronics, computer technologies, advanced manufacturing technologies (robotics, automation, computer-aided manufacturing (CAM) and other courses in special areas of technology. The program also includes a solid core of courses in general education. Each of the courses is directly transferable to CCSU. Successful completion of the program allows students to enter their junior year at Central Connecticut State University.

Curriculum

Students may enroll in this program either full or part-time. Courses are offered both during the day or evenings. For students not yet prepared for the required mathematical courses, MCC offers a wide range of developmental course offerings.

The Electronics Technology Option, Technology Studies associate degree program prepares students to pursue a career as an electronics technician or to transfer to complete a B.S. degree in electronics technology. Consultation with a faculty advisor is strongly recommended.

Learning Outcomes

Upon successful completion of all Technology Studies options program requirements, graduates will

1. Apply appropriate mathematical and scientific principles to engineering and technology applications.
2. Demonstrate proficiency in technical fundamentals to analyze and resolve technology problems.
3. Apply knowledge and skills to develop, interpret, and select appropriate technological processes.

In addition, the graduate will complete the comprehensive learning outcomes identified with the General Education Core.
Electronics Technology Option Requirements

- ENG* 101: Composition 3 Credits (Gen Ed - Mode 2)
- EGR* 111: Introduction to Engineering 3 Credits

- MAT* 185: Trigonometric Functions 3 Credits or
- MAT* 186: Precalculus 4 Credits

- HIS* 101: Western Civilization I 3 Credits or
- any Gen Ed - Mode 6 HIS* course 3 Credits

- ECN* 102: Principles of Microeconomics 3 Credits or
- any ECN* course 3 Credits

Subtotal: 15-16

- CHE* 111: Concepts of Chemistry 4 Credits (Gen Ed - Mode 5) or
- CHE* 121: General Chemistry I 4 Credits (Gen Ed - Mode 5)

- CAD* 110: Introduction to CAD 3 Credits
- MAT* 165: Elementary Statistics with Computer Applications 4 Credits
- EET* 108: AC/DC Circuit Analysis 4 Credits
- Gen Ed any Gen Ed - Mode 6 GEO* or POL* 3 Credits

Subtotal: 18

- ENG* 202: Technical Writing 3 Credits
- PHY* 121: General Physics I 4 Credits
- EET* 132: Electronics 4 Credits
- COM* 173: Public Speaking 3 Credits

- PHL* 111: Ethics 3 Credits (Gen Ed - Mode 3 ) or
- any Gen Ed - Mode 3 PHL* course 3 Credits

Subtotal: 17

- PHY* 122: General Physics II 4 Credits
- Choose one course from Gen Ed - Mode 1 3 Credits
- EET* 252: Digital Electronics 4 Credits

- PSY* 247: Industrial and Organizational Psychology 3 Credits (Gen Ed - Mode 6) or
- SOC* 101: Principles of Sociology 3 Credits (Gen Ed - Mode 6) or
- any Gen Ed - Mode 6 PSY* or SOC* course 3 Credits

Subtotal: 14

Total Credits Required: 64-65
Technology Studies, A.S. – Engineering Technology Option

Program Design

The Connecticut College of Technology Pathways program allows students to complete an associate in science degree program in Technology Studies at MCC, and continue on to complete a bachelor of science degree in Industrial Technology, Engineering Technology, Electronic Technology, Computer-Aided Design or Technology Education at Central Connecticut State University’s (CCSU) School of Technology. The curriculum offers a broad range of studies and topics in: mathematics, physics, chemistry, engineering drawing and computer-aided design (CAD), electronics, computer technologies, advanced manufacturing technologies (robotics, automation, computer-aided manufacturing (CAM) and other courses in special areas of technology. The program also includes a solid core of courses in general education. Each of the courses is directly transferable to CCSU. Successful completion of the program allows students to enter their junior year at Central Connecticut State University.

Curriculum

Students may enroll in this program either full or part-time. Courses are offered both during the day or evenings. For students not yet prepared for the required mathematical courses, MCC offers a wide range of developmental course offerings. The Engineering Technology Option, Technology Studies associate degree program prepares students primarily to transfer to complete a B.S. degree in civil or mechanical engineering technology. Consultation with a faculty advisor is strongly recommended.

Learning Outcomes

Upon successful completion of all Technology Studies options program requirements, graduates will

1. Apply appropriate mathematical and scientific principles to engineering and technology applications.
2. Demonstrate proficiency in technical fundamentals to analyze and resolve technology problems.
3. Apply knowledge and skills to develop, interpret, and select appropriate technological processes.

In addition, the graduate will complete the comprehensive learning outcomes identified with the General Education Core.
Engineering Technology Option Requirements

- ENG* 101: Composition 3 Credits (Gen Ed - Mode 2)
- EGR* 111: Introduction to Engineering 3 Credits
- EGR* 230: C++ For Engineers 3 Credits
- CHE* 121: General Chemistry I 4 Credits (Gen Ed - Mode 5)

- HIS* 101: Western Civilization I 3 Credits (Gen Ed - Mode 6) or
- Choose any Gen Ed - Mode 6 HIS* course 3 Credits
  **Subtotal: 16**

- ECN* 102: Principles of Microeconomics 3 Credits or
- Choose any ECN* course 3 Credits

- CAD* 110: Introduction to CAD 3 Credits
- MAT* 165: Elementary Statistics with Computer Applications 4 Credits
- MAT* 254: Calculus I 4 Credits (formerly MAT* 250)‡

  - Choose any Gen Ed - Mode 6 GEO* or POL* course 3 Credits
  **Subtotal: 17**

- PHY* 121: General Physics I 4 Credits or
- PHY* 221: Calculus-Based Physics I 4 Credits

- EGR* 211: Engineering Statics 3 Credits
- PHL* 111: Ethics 3 Credits
- Choose any Gen Ed - Mode 3 PHL* course 3 Credits
- COM* 173: Public Speaking 3 Credits
- MAT* 256: Calculus II 4 Credits
  **Subtotal: 17**

- ENG* 202: Technical Writing 3 Credits
- Choose one course from Gen Ed - Mode 1 3 Credits
- EGR* 212: Engineering Dynamics 3 Credits

- PHY* 122: General Physics II 4 Credits or
- PHY* 222: Calculus-Based Physics II 4 Credits

- PSY* 247: Industrial and Organizational Psychology 3 Credits (Gen Ed - Mode 6) or
- SOC* 101: Principles of Sociology 3 Credits (Gen Ed - Mode 6) or
- Choose any Gen Ed - Mode 6 PSY* or SOC* course 3 Credits
  **Subtotal: 16**

Total Credits Required: 66

Note:
‡ Students who receive credit for MAT* 250 have fulfilled the MAT* 254 requirement.
Technology Studies, A.S. –
Industrial Technology Option

Program Design
The Connecticut College of Technology Pathways program allows students to complete an associate in science degree program in Technology Studies at MCC, and continue on to complete a bachelor of science degree in Industrial Technology, Engineering Technology, Electronic Technology, Computer-Aided Design or Technology Education at Central Connecticut State University’s (CCSU) School of Technology. The curriculum offers a broad range of studies and topics in: mathematics, physics, chemistry, engineering drawing and computer-aided design (CAD), electronics, computer technologies, advanced manufacturing technologies (robotics, automation, computer-aided manufacturing (CAM) and other courses in special areas of technology. The program also includes a solid core of courses in general education. Each of the courses is directly transferable to CCSU. Successful completion of the program allows students to enter their junior year at Central Connecticut State University.

Curriculum
Students may enroll in this program either full or part-time. Courses are offered both during the day or evenings. For students not yet prepared for the required mathematical courses, MCC offers a wide range of developmental course offerings. The Industrial Technology Option, Technology Studies associate degree program prepares students to pursue a career as an engineering technician or to transfer to complete a B.S. degree in industrial technology. Consultation with a faculty advisor is strongly recommended.

Learning Outcomes
Upon successful completion of all Technology Studies options program requirements, graduates will
1. Apply appropriate mathematical and scientific principles to engineering and technology applications.
2. Demonstrate proficiency in technical fundamentals to analyze and resolve technology problems.
3. Apply knowledge and skills to develop, interpret, and select appropriate technological processes.

In addition, the graduate will complete the comprehensive learning outcomes identified with the General Education Core.

Industrial Technology Option Requirements
- ENG* 101: Composition 3 Credits (Gen Ed - Mode 2)
- EGR* 111: Introduction to Engineering 3 Credits
- Choose any GEO* or POL* course 3 Credits
- MAT* 185: Trigonometric Functions 3 Credits or
- MAT* 186: Precalculus 4 Credits
- HIS* 101: Western Civilization I 3 Credits (Gen Ed - Mode 6) or
- Choose any Gen Ed - Mode 6 HIS* course 3 Credits
ECN* 102: Principles of Microeconomics 3 Credits or
Choose any ECN* course 3 Credits

Subtotal: 18-19

CAD* 110: Introduction to CAD 3 Credits
MAT* 165: Elementary Statistics with Computer Applications 4 Credits
Choose one Technical Elective course 3 Credits‡
PHL* 111: Ethics 3 Credits or
Choose any Gen Ed - Mode 3 PHL* course 3
CHE* 111: Concepts of Chemistry 4 Credits (Gen Ed - Mode 5) or
CHE* 121: General Chemistry I 4 Credits (Gen Ed - Mode 5)

Subtotal: 17

PHY* 110: Introductory Physics 4 Credits or
PHY* 121: General Physics I 4 Credits
EGR* 230: C++ For Engineers 3 Credits
Choose one Technical Elective course 3 Credits‡
COM* 173: Public Speaking 3 Credits
Choose one Technical Elective course 3 Credits‡

Subtotal: 16

ENG* 202: Technical Writing 3 Credits
Choose one course from Gen Ed - Mode 1 3 Credits
Choose one Technical Elective course 3 Credits‡
Choose one Technical Elective course 3 Credits‡
PSY* 247: Industrial and Organizational Psychology 3 Credits (Gen Ed - Mode 6) or
SOC* 101: Principles of Sociology 3 Credits (Gen Ed - Mode 6) or
Choose any Gen Ed - Mode 6 PSY* or SOC* course 3 Credits

Subtotal: 15

Total Credits Required: 66-67

Note:
‡ Technical Electives:
A total of 15 credits of technical electives must be completed from those courses listed below. Consultation with a faculty member is strongly advised.
- EGR* 240: Current Topics in Sustainable Engineering 1 Credits
- EGR* 241: Sustainable Electrical Systems 4 Credits
- EGR* 242: Sustainable Building Systems 4 Credits
- EVS* 130: Sustainable Energy and the Environment 3 Credits
- EVS* 131: Sustainable Energy for Your Community 3 Credits
- MFG* 106: Computer-Aided Manufacturing I 3 Credits
- MFG* 111: Manufacturing Materials and Process I 3 Credits
- MFG* 112: Manufacturing Materials and Process II 3 Credits
- MFG* 171: Introduction to Lean Manufacturing 3 Credits
- MFG* 172: Introduction to Lean Supply Chain Management 3 Credits
- MFG* 205: Principles of CNC with Mastercam 3 Credits
- MFG* 230: Statistical Process Control 3 Credits
- MFG* 239: Geometric Dimension and Tolerancing 3 Credits
- MFG* 271: Advanced Lean Manufacturing 3 Credits
- MFG* 272: Implementation of Lean Supply Chain Management 3 Credits
Technology Studies, A.S. - Lean Manufacturing and Supply Chain Management Option

Program Design
The Connecticut College of Technology Pathways program allows students to complete an associate in science degree program in Technology Studies at MCC, and continue on to complete a bachelor of science degree in Industrial Technology, Engineering Technology, Electronic Technology, Computer-Aided Design or Technology Education at Central Connecticut State University’s (CCSU) School of Technology. The curriculum offers a broad range of studies and topics in: mathematics, physics, chemistry, engineering drawing and computer-aided design (CAD), electronics, computer technologies, advanced manufacturing technologies (robotics, automation, computer-aided manufacturing (CAM) and other courses in special areas of technology. The program also includes a solid core of courses in general education. Each of the courses is directly transferable to CCSU. Successful completion of the program allows students to enter their junior year at Central Connecticut State University.

Curriculum
Students may enroll in this program either full or part-time. Courses are offered both during the day or evenings. For students not yet prepared for the required mathematical courses, MCC offers a wide range of developmental course offerings.
The Lean Manufacturing and Supply Chain Management Option, Technology Studies associate degree program prepares students to work in the 21st century world of Lean Manufacturing and supply chain management. Companies are now employing these techniques to reduce waste, cut costs and compete globally. Consultation with an academic advisor/technical faculty is strongly recommended. Students may enroll in this program either full or part-time. Courses are offered both during the day or evenings. For students not yet prepared for the required mathematical courses, MCC offers a wide range of developmental course offerings.

Learning Outcomes
Upon successful completion of all Technology Studies options program requirements, graduates will
1. Apply appropriate mathematical and scientific principles to engineering and technology applications.
2. Demonstrate proficiency in technical fundamentals to analyze and resolve technology problems.
3. Apply knowledge and skills to develop, interpret, and select appropriate technological processes.
In addition, the graduate will complete the comprehensive learning outcomes identified with the General Education Core.
Lean Manufacturing & Supply Chain Management Option

- MAT* 186: Precalculus 4 Credits or
- MAT* 185: Trigonometric Functions 3 Credits
- Choose any Gen Ed - Mode 6 GEO* or POL* course 3 Credits
- ENG* 101: Composition 3 Credits (Gen Ed - Mode 2)
- ECN* 102: Principles of Microeconomics 3 Credits
- MFG* 171: Introduction to Lean Manufacturing 3 Credits

Subtotal: 15-16

- MAT* 165: Elementary Statistics with Computer Applications 4 Credits
- CHE* 121: General Chemistry I 4 Credits (Gen Ed - Mode 5)
- MFG* 271: Advanced Lean Manufacturing 3 Credits
- CAD* 110: Introduction to CAD 3 Credits
- PHL* 111: Ethics 3 Credits or any Gen Ed - Mode 3 PHL* course 3 Credits

Subtotal: 17

- HIS* 101: Western Civilization I 3 Credits or
- Choose any Gen Ed - Mode 6 HIS* course 3 Credits
- PHY* 121: General Physics I 4 Credits
- MFG* 172: Introduction to Lean Supply Chain Management 3 Credits
- COM* 173: Public Speaking 3 Credits
- MFG* 111: Manufacturing Materials and Process I 3 Credits

Subtotal: 16

- ENG* 202: Technical Writing 3 Credits
- Choose one course from Gen Ed - Mode 1 3 Credits
- MFG* 112: Manufacturing Materials and Process II 3 Credits
- MFG* 272: Implementation of Lean Supply Chain Management 3 Credits
- MFG* 230: Statistical Process Control 3 Credits
- PSY* 247: Industrial and Organizational Psychology 3 Credits (Gen Ed - Mode 6) or
- SOC* 101: Principles of Sociology 3 Credits (Gen Ed - Mode 6) or
- Choose any Gen Ed - Mode 6 PSY* or SOC* course 3 Credits

Subtotal: 18

Total Credits Required: 66-67
Technology Studies, A.S. – Technology Education Option

Program Design

The Connecticut College of Technology Pathways program allows students to complete an associate in science degree program in Technology Studies at MCC, and continue on to complete a bachelor of science degree in Industrial Technology, Engineering Technology, Electronic Technology, Computer-Aided Design or Technology Education at Central Connecticut State University’s (CCSU) School of Technology. The curriculum offers a broad range of studies and topics in: mathematics, physics, chemistry, engineering drawing and computer-aided design (CAD), electronics, computer technologies, advanced manufacturing technologies (robotics, automation, computer-aided manufacturing (CAM) and other courses in special areas of technology. The program also includes a solid core of courses in general education. Each of the courses is directly transferable to CCSU. Successful completion of the program allows students to enter their junior year at Central Connecticut State University.

Curriculum

Students may enroll in this program either full or part-time. Courses are offered both during the day or evenings. For students not yet prepared for the required mathematical courses, MCC offers a wide range of developmental course offerings.

The Technology Education Option, Technology Studies associate degree program prepares students for a career teaching technology, K-12, upon completion of a B.S. degree in technology and engineering education. Consultation with a faculty advisor is strongly recommended.

Technology Education Option Requirements

- ENG* 101: Composition 3 Credits (Gen Ed - Mode 2)
- EGR* 111: Introduction to Engineering 3 Credits
- MAT* 186: Precalculus 4 Credits
- HIS* 201: United States History I 3 Credits (Gen Ed - Mode 6)
- ECN* 102: Principles of Microeconomics 3 Credits
  Subtotal: 16

- CAD* 110: Introduction to CAD 3 Credits
- PHL* 111: Ethics 3 Credits or any Gen Ed - Mode 3 PHL* course
- MAT* 165: Elementary Statistics with Computer Applications 4 Credits
- CHE* 111: Concepts of Chemistry 4 Credits (Gen Ed - Mode 5)
- MFG* 111: Manufacturing Materials and Process I 3 Credits
  Subtotal: 17

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- EGR* 230: C++ For Engineers 3 Credits
- PHY* 110: Introductory Physics 4 Credits
- EET* 108: AC/DC Circuit Analysis 4 Credits
- COM* 173: Public Speaking 3 Credits
- EGR* 112: Engineering Drawing Interpretations 3 Credits

**Subtotal: 17**

- ENG* 202: Technical Writing 3 Credits
- Choose one course from Gen Ed - Mode 1 3 Credits
- Choose one Technical Elective course 3 Credits‡
- Choose one Technical Elective course 3 Credits‡
- Choose any Gen Ed - Mode 6 GEO* or POL* course 3 Credits

- PSY* 247: Industrial and Organizational Psychology 3 Credits (Gen Ed - Mode 6) or
- SOC* 101: Principles of Sociology 3 Credits (Gen Ed - Mode 6) or
- Choose any Gen Ed - Mode 6 PSY* or SOC* course 3 Credits

**Subtotal: 18**

**Total Credits Required: 68**

**Note:**

*Technical Electives:
A total of six credits are required from among the technical elective courses listed below.*

- CAD* 218: CAD 3d Mechanical (AutoCAD) 3 Credits
- CAD* 220: Parametric Design (Solidworks) 3 Credits
- CAD* 271: CAD Solids Mechanical Pro/ENGINEER 3 Credits
- EGR* 112: Engineering Drawing Interpretations 3 Credits
- EET* 108: AC/DC Circuit Analysis 4 Credits
- EET* 132: Electronics 4 Credits
- EET* 252: Digital Electronics 4 Credits
- EET* 118: Electrical Power Systems 3 Credits
- MFG* 106: Computer-Aided Manufacturing I 3 Credits
- MFG* 112: Manufacturing Materials and Process II 3 Credits
- MFG* 171: Introduction to Lean Manufacturing 3 Credits
- MFG* 172: Introduction to Lean Supply Chain Management 3 Credits
- MFG* 205: Principles of CNC with Mastercam 3 Credits
- MFG* 230: Statistical Process Control 3 Credits
- MFG* 239: Geometric Dimension and Tolerancing 3 Credits
- MFG* 271: Advanced Lean Manufacturing 3 Credits
- MFG* 272: Implementation of Lean Supply Chain Management 3 Credits
Technology Studies, A.S. – Technology Management Option

Program Design
The Connecticut College of Technology Pathways program allows students to complete an associate in science degree program in Technology Studies at MCC, and continue on to complete a bachelor of science degree in Industrial Technology, Engineering Technology, Electronic Technology, Computer-Aided Design or Technology Education at Central Connecticut State University’s (CCSU) School of Technology. The curriculum offers a broad range of studies and topics in: mathematics, physics, chemistry, engineering drawing and computer-aided design (CAD), electronics, computer technologies, advanced manufacturing technologies (robotics, automation, computer-aided manufacturing (CAM) and other courses in special areas of technology. The program also includes a solid core of courses in general education. Each of the courses is directly transferable to CCSU. Successful completion of the program allows students to enter their junior year at Central Connecticut State University.

Curriculum
Students may enroll in this program either full or part-time. Courses are offered both during the day or evenings. For students not yet prepared for the required mathematical courses, MCC offers a wide range of developmental course offerings. The Connecticut College of Technology Pathways program allows students to earn an associate in science degree in Technology Studies at Manchester Community College, and continue on to complete a bachelor of science degree in Technology and Construction Management at Central Connecticut State University’s (CCSU) School of Industrial and Engineering Technology.

Learning Outcomes
Upon successful completion of all Technology Studies options program requirements, graduates will
1. Apply appropriate mathematical and scientific principles to engineering and technology applications.
2. Demonstrate proficiency in technical fundamentals to analyze and resolve technology problems.
3. Apply knowledge and skills to develop, interpret, and select appropriate technological processes.
In addition, the graduate will complete the comprehensive learning outcomes identified with the General Education Core.

Technology Management Option Requirements

• ENG* 101: Composition 3 Credits (Gen Ed - Mode 2)
• EGR* 111: Introduction to Engineering 3 Credits
• Choose any Gen Ed - Mode 6 GEO* or POL* course 3 Credits
• MAT* 185: Trigonometric Functions 3 Credits or
• MAT* 186: Precalculus 4 Credits

• HIS* 121: World Civilization I 3 Credits or
• HIS* 122: World Civilization II 3 Credits or
• Choose any Gen Ed - Mode 6 HIS* course 3 Credits
Subtotal: 15-16
CHE* 111: Concepts of Chemistry 4 Credits or
CHE* 121: General Chemistry I 4 Credits

CAD* 110: Introduction to CAD 3 Credits
PHL* 111: Ethics 3 Credits or any Gen Ed - Mode 3 PHL* course
MAT* 165: Elementary Statistics with Computer Applications 4 Credits
ACC* 115: Financial Accounting 4 Credits

Subtotal: 18

BMG* 202: Principles of Management 3 Credits
PHY* 110: Introductory Physics 4 Credits or
PHY* 121: General Physics I 4 Credits

Choose one Business/Technical Elective 3 Credits‡
COM* 173: Public Speaking 3 Credits

ECN* 102: Principles of Microeconomics 3 Credits or
Choose one Mode 6 ECN* course 3 Credits

Subtotal: 16

ENG* 202: Technical Writing 3 Credits
Choose one course from Gen Ed - Mode 1 3 Credits
Choose one Business/Technical Elective 3-4 Credits‡
CST* 205: Project Management 4 Credits

PSY* 247: Industrial and Organizational Psychology 3 Credits or
Choose any Gen Ed - Mode 6 PSY* or SOC* course 3 Credits

Subtotal: 16-17

Total Credits Required: 66-67

Note:
‡ Business/Technical Electives:
  • ACC* 118: Managerial Accounting 4 Credits
  • BMK* 201: Principles of Marketing 3 Credits
  • CST* 201: Introduction to MIS 3 Credits
  • MFG* 111: Manufacturing Materials and Process I 3 Credits
  • MFG* 112: Manufacturing Materials and Process II 3 Credits
  • MFG* 171: Introduction to Lean Manufacturing 3 Credits
  • MFG* 172: Introduction to Lean Supply Chain Management 3 Credits
  • MFG* 205: Principles of CNC with Mastercam 3 Credits
  • MFG* 230: Statistical Process Control 3 Credits
  • MFG* 271: Advanced Lean Manufacturing 3 Credits
  • MFG* 272: Implementation of Lean Supply Chain Management 3 Credits
Technology Studies, A.S., Computer-Aided Design Option

Program Design

The Connecticut College of Technology Pathways program allows students to complete an associate in science degree program in Technology Studies at MCC, and continue on to complete a bachelor of science degree in Industrial Technology, Engineering Technology, Electronic Technology, Computer-Aided Design or Technology Education at Central Connecticut State University’s (CCSU) School of Technology. The curriculum offers a broad range of studies and topics in: mathematics, physics, chemistry, engineering drawing and computer-aided design (CAD), electronics, computer technologies, advanced manufacturing technologies (robotics, automation, computer-aided manufacturing (CAM) and other courses in special areas of technology. The program also includes a solid core of courses in general education. Each of the courses is directly transferable to CCSU. Successful completion of the program allows students to enter their junior year at Central Connecticut State University.

Curriculum

Students may enroll in this program either full or part-time. Courses are offered both during the day or evenings. For students not yet prepared for the required mathematical courses, MCC offers a wide range of developmental course offerings.

The Computer-Aided Design Option, Technology Studies associate degree program prepares students to pursue a career as a computer-aided design specialist or to transfer to complete a B.S. degree in technology. Consultation with a faculty advisor is strongly recommended.

The Computer-Aided Design Option, Technology Studies associate degree program prepares students to pursue a career as a computer-aided design specialist or to transfer to complete a B.S. degree in technology. Consultation with a faculty advisor is strongly recommended.

Learning Outcomes

Upon successful completion of all Technology Studies options program requirements, graduates will
1. Apply appropriate mathematical and scientific principles to engineering and technology applications.
2. Demonstrate proficiency in technical fundamentals to analyze and resolve technology problems.
3. Apply knowledge and skills to develop, interpret, and select appropriate technological processes.

In addition, the graduate will complete the comprehensive learning outcomes identified with the General Education Core.
Computer-Aided Design Option Requirements

- ENG* 101: Composition 3 Credits (Gen Ed - Mode 2)
- CAD* 110: Introduction to CAD 3 Credits
- EGR* 111: Introduction to Engineering 3 Credits
- Gen Ed - Mode 6 any GEO* or POL* 3 Credits
- MAT* 185: Trigonometric Functions 3 Credits or
- MAT* 186: Precalculus 4 Credits
- HIS* 101: Western Civilization I 3 Credits or
- any Gen Ed - Mode 6 HIS* course 3 Credits  
  **Subtotal: 18-19**
- ECN* 102: Principles of Microeconomics 3 Credits or
- any ECN* course
- CHE* 111: Concepts of Chemistry 4 Credits (Gen Ed - Mode 5) or
- CHE* 121: General Chemistry I 4 Credits (Gen Ed - Mode 5)
- PHL* 111: Ethics 3 Credits or any Gen Ed - Mode 3 PHL* course
- MAT* 165: Elementary Statistics with Computer Applications 4 Credits
- CAD* 218: CAD 3D Mechanical (AutoCAD) 3 Credits  
  **Subtotal: 17**
- PHY* 110: Introductory Physics 4 Credits or
- PHY* 121: General Physics I 4 Credits
- EGR* 230: C++ For Engineers 3 Credits
- CAD* 220: Parametric Design (Solidworks) 3 Credits
- COM* 173: Public Speaking 3 Credits
- EGR* 112: Engineering Drawing Interpretations 3 Credits  
  **Subtotal: 16**
- ENG* 202: Technical Writing 3 Credits
- Choose one course from Gen Ed - Mode 1 3 Credits
- MFG* 239: Geometric Dimension and Tolerancing 3 Credits
- MFG* 205: Principles of CNC with Mastercam 3 Credits
- PSY* 247: Industrial and Organizational Psychology 3 Credits or
- SOC* 101: Principles of Sociology 3 Credits or
- any Gen Ed - Mode 6 PSY* or SOC* course 3 Credits  
  **Subtotal: 15**

**Total Credits Required: 66-67**
Therapeutic Recreation, A.S.

Program Design
The Therapeutic Recreation associate degree program is designed to address the need for a degree beyond the Therapeutic Recreation certificate for students pursuing careers as a therapeutic recreation director or supervisor in long-term care facilities. The associate degree in therapeutic recreation will also prepare students to work in a variety of therapeutic recreation settings such as rehabilitation facilities, penal institutions, group homes, facilities for developmentally disabled individuals and in psychiatric settings. Students can expect to obtain employment upon completion of this degree program or transfer to a baccalaureate institution in therapeutic recreation. Therapeutic recreation is a specialized allied health field within the recreation profession. Associated with leisure aspects of medical treatment, therapeutic recreation attempts to physically and socially rehabilitate patients who have chronic physical, psychological and social disabilities. It involves recreation services that give the patient an opportunity to participate in recreational, leisure and group activities specifically designed to aid in the recovery or adjustment to illness, disability or a specific social problem. Due to standards set by the Joint Commission on Accreditation of Healthcare Organizations (JCAHO), students are advised that the healthcare facilities to which they are assigned for clinical rotations may require that they submit to a criminal background check before beginning their clinical experiences. Manchester Community College cannot be responsible for finding an alternate clinical placement for a student who fails to pass the background check. A student who is unable to complete the required clinical experience will be unable to complete the requirements for the associate degree in Therapeutic Recreation but may be able to apply some or all of the credits completed to an associate degree in General Studies. Students are advised to meet with an MCC counselor to discuss degree completion requirements.

Curriculum
Students may enroll in this program full-time or part-time and attend classes days or evenings.

Learning Outcomes
Upon successful completion of all Therapeutic Recreation degree program requirements, graduates will

1. Meet the state health code requirements to hold the position of a therapeutic recreation director in the State of Connecticut.
2. Demonstrate the ability to successfully assess, plan, implement and evaluate therapeutic recreation programs for individuals with special needs both in a clinical and community setting.
3. Have developed leadership, interpersonal and communication skills necessary to work in a healthcare or community-based setting.
4. Demonstrate professional behavior consistent with the therapeutic recreation code of ethics.

In addition, the graduate will complete the comprehensive learning outcomes identified with the General Education Core.
Therapeutic Recreation Requirements

- Elective CSA* or CSC* course 1-2 Credits
- ENG* 101: Composition 3 Credits (Gen Ed - Mode 2)
- PSY* 111: General Psychology I 3 Credits (Gen Ed - Mode 6)
- RLS* 101: Introduction to Recreation and Leisure Services 3 Credits
- HLT* 151: Health and Wellness Promotion 3 Credits
- RLS* 121: Introduction to Therapeutic Recreation Services 3 Credits
  **Subtotal: 16-17**

- Elective gerontology 3 Credits

- MAT* 109: Quantitative Literacy 3 Credits or
- MAT* 165: Elementary Statistics with Computer Applications 4 Credits

- PSY* 163: Children with Disabilities 3 Credits or
- PSY* 173: Adults with Disabilities 3 Credits

- SSC* 294: Cooperative Education/Work Experience 3 Credits
- RLS* 122: Processes and Techniques in Therapeutic Recreation 3 Credits
  **Subtotal: 15-16**

- BIO* 115: Human Biology 4 Credits (Gen Ed - Mode 5) ‡
- Choose one course from Gen Ed - Mode 1 3 Credits
- Choose one course from Gen Ed - Mode 3 3 Credits
- PSY* 201: Life Span Development 3 Credits (Gen Ed - Mode 6)
- RLS* 221: Therapeutic Recreation Programming 3 Credits
  **Subtotal: 16**

- COM* 173: Public Speaking 3 Credits (Gen Ed - Mode 3)
- Choose any ANT*, ECN*, GEO*, HIS*, POL*, PSY*, SOC* or SSC* course or GERN 161 3 Credits
- RLS* 223: Leisure and Aging 3 Credits
- RLS* 295: Professional Practicum in Therapeutic Recreation 4 Credits
  **Subtotal: 13**

**Total Credits Required: 60-62**

**Note:**

‡ *Students planning to transfer to a baccalaureate program should take BIO* 211 and BIO* 212.
Visual Fine Arts, A.A.

Program Design

For those students seeking a professional career, the Visual Fine Arts associate degree program offers a transfer-oriented course of study that leads to enrollment in an art school or other baccalaureate institution. Careers in commercial art, art education and fine arts are open to graduates with bachelor’s degrees.
The Visual Fine Arts program also serves an ever-expanding population of students seeking personal enjoyment in the creative process. Technical expertise and aesthetic theory are offered to those who pursue art as an avocation.

Curriculum

Students may enroll in this program full- or part-time. There are no requirements or prerequisites for students wishing to take art courses part-time or as electives for other programs.
Fine arts faculty members are available for consultation with students who wish to enroll in the program and thereafter for course selection and transfer information.

Learning Outcomes

Upon successful completion of all Visual Fine Arts degree program requirements, graduates will
1. Execute skills and techniques necessary for studio art and demonstrate dexterity with tools, knowledge of equipment specific to various media, and the safe use of all materials and equipment.
2. Demonstrate an historical, cross-cultural appreciation and awareness of the field of visual art.
3. Demonstrate creative thinking; the ability to solve aesthetic, technical and conceptual problems; and critical awareness.
4. Demonstrate an understanding of the principles and elements of two- and three-dimensional design and their applications to various studio disciplines.
5. Compile a comprehensive portfolio of work that reflects the breadth of their study and prepares them for transfer to baccalaureate institutions.

In addition, the graduate will complete the comprehensive learning outcomes identified with the General Education Core.
Visual Fine Arts Requirements

- ENG* 101: Composition 3 Credits (Gen Ed - Mode 2)
- ART* 103: Art History III 3 Credits (Gen Ed - Mode 1) or
- ART* 104: Contemporary Art History 3 Credits (Gen Ed - Mode 1)
- ART* 111: Drawing I 3 Credits or ‡
- ART* 113: Figure drawing I 3 Credits
- ART* 121: Two-Dimensional Design 3 Credits
- Choose any ANT*, ECN*, GEO*, HIS*, POL*, PSY*, SOC* or SSC* course 3 Credits
  Subtotal: 15

- ENG* 110: Introduction to Literature 3 Credits (Gen Ed - Mode 3)
- ART* 101: Art History I 3 Credits ‡‡ or
  studio course 3 Credits
- ART* 122: Three-Dimensional Design 3 Credits
- ART* 151: Painting I 3 Credits
- ART* 131: Sculpture I 3 Credits
- Choose one course from Gen Ed - Mode 5 3 Credits
  Subtotal: 18

- ART* 102: Art History II: Renaissance to the Present 3 Credits ‡‡ or
  studio course 3 Credits
- ART* 167: Printmaking I 3 Credits or
- ART* 161: Ceramics I 3 Credits or
- ART* 141: Photography I 3 Credits
- Elective studio course 3 Credits ‡‡
- Elective liberal arts and science 3 Credits
- Choose one course from Gen Ed - Mode 6 3 Credits
  Subtotal: 15

- Elective studio course 3 Credits ‡‡‡
- Elective studio course 3 Credits ‡‡‡
- Gen Ed fine arts 3 Credits
- Elective studio course 3 Credits
- MAT* 109: Quantitative Literacy 3 Credits (Gen Ed - Mode 4)
  Subtotal: 15

Total Credits Required: 63

Note:

‡ At least two semesters of Drawing are strongly recommended.
‡‡ Either ART* 101 or ART* 102 is required, but not both.
‡‡‡ A studio course is any 6-hour ART*, DGA* or GRA* course.
The Visual Fine Arts program strongly recommends that students take all of the following before taking any other Visual Fine Arts course work. This will provide students with the essential foundations for all other Visual Fine Arts program course work.

- ART* 111: Drawing I 3 Credits
- ART* 121: Two-Dimensional Design 3 Credits
- ART* 122: Three-Dimensional Design 3 Credits
Accounting Certificate

Program Design
The Accounting certificate program is designed for students who are interested in specialized accounting and/or those who already have a bachelor’s degree and would like to change careers. This program also serves individuals currently employed who are not seeking a degree or career change but would like formal training or professional development.

Curriculum
Students may enroll full- or part-time. Students must achieve at least a C- or better in an accounting course to continue on to the next level. Note: All business and accounting courses, except for BBG* 108 (formerly QM 110), have prerequisites. Check course description before registering.

Learning Outcomes
Upon successful completion of all Accounting certificate program requirements, graduates will
1. Demonstrate mastery of generally accepted accounting principles and their manual and computerized spreadsheet applications to all phases of the accounting cycle.
2. Complete relatively complex accounting problems and be familiar with current financial accounting standards and practices.
3. Apply accounting concepts and critical thinking skills to produce accurate financial statements.
4. Prepare the 1040 tax return and supporting schedules under simulated conditions.
5. Explain how budgeting, activity-based costing and strategic cost management foster the effective use of resources and help an organization accomplish its goals.
6. Possess computer competencies for maximum efficiency including the use of accounting, spreadsheet and presentation software. Use the Internet for business purposes, including research, marketing and stock market analysis.
7. Work with others, including culturally and intellectually diverse people; think critically; and gain an appreciation for life-long learning.
8. Demonstrate a responsible attitude in relationships with employers, peers and toward the working environment.
9. Understand the interrelationships between accounting and all other areas within a business, including working with other departments to achieve overall strategic goals.
10. Develop sound ethical and moral professional characteristics.

Required Courses
- ACC* 115: Financial Accounting 4 Credits
- ACC* 118: Managerial Accounting 4 Credits
- ACC* 125: Accounting Computer Applications I 3 Credits
- ACC* 275: Principles of Intermediate Accounting I 4 Credits
- ACC* 276: Principles of Intermediate Accounting II 4 Credits
- ACC* 231: Cost Accounting I 3 Credits or
  ACC* 251: Fund Accounting 3 Credits ‡
- ACC* 241: Federal Taxes I 3 Credits
- BBG* 234: Legal Environment of Business 3 Credits

Total Credits Required: 28

Note: ‡ Students who are interested in a manufacturing environment should take ACC* 231: Cost Accounting I. Students who are interested in local, state, federal, hospital, fundraising, or college or university accounting should take ACC* 251: Fund Accounting. Students without a strong foundation in computer skills should take CSA* 105: Introduction to Software Applications.
Business Office Technology Certificate - Medical Insurance Specialist

Program Design
Business Office Technology certificate programs allow students to specialize in areas of interest and obtain entry-level office positions. Course credit may be applied toward an associate degree. Advanced placement in keyboarding is available for students with prior training. These certificate programs may be taken on a full- or part-time basis. They are designed for high school graduates, persons desiring to reenter the work place and college graduates seeking employment.

Curriculum
With the numerous changes in the health care industry due to federal incentives for the conversion to electronic automation of managing healthcare information through 2016, the Medical Insurance Specialist will continue to play an important part in the role of the physician office through proper documentation oversight. This certificate program is designed to prepare students to manage the medical insurance specialist process along with coding and billing insurance claims in doctors' offices, hospitals, HMOs and other health care facilities.

Learning Outcomes
Upon successful completion of all Medical Insurance Specialist certificate program requirements, graduates will
1. Create and modify standard types of business communications in both printed and electronic forms.
2. Demonstrate strong interpersonal and human relations skills required for success in a professional setting.
3. Demonstrate proficiency in the use of ICD-10 and CPT coding in entering and/or processing medical insurance claims.
4. Acquire up-to-date technology skills using medical office computer applications.
5. Understand and adhere to the importance of federal regulations, medical ethics, legal implications, and patient confidentiality when handling protected health information.

Required Courses
- BOT* 111: Keyboarding for Info Pro I 3 Credits
- BIO* 115: Human Biology 4 Credits
- BOT* 180: Medical Terminology 3 Credits
- BOT* 181: Medical Coding I 3 Credits
Subtotal: 13
- BOT* 220: Computerized Communication 3 Credits
- BOT* 182: Medical Coding II 3 Credits
- BOT* 287: Foundations/Management Medical Insurance 3 Credits
Subtotal: 9

Total Credits Required: 22

Note: Completion of BOT* 181 Medical Coding I and BOT* 182 Medical Coding II will begin to prepare students to sit for the Certified Professional Coder (CPC) exam for physician and outpatient coding. This certification is offered through the American Academy of Professional Coders.
Business Office Technology Certificate - Medical Transcription

Program Design
Business Office Technology certificate programs allow students to specialize in areas of interest and obtain entry-level office positions. Course credit may be applied toward an associate degree. Advanced placement in keyboarding is available for students with prior training. Students can modify their programs depending upon experience. These certificate programs may be taken on a full- or part-time basis. They are designed for high school graduates, persons desiring to reenter the work place and college graduates seeking employment.

Curriculum
A medical transcriptionist translates, from oral to written form, highly technical information summarizing medical histories, diagnoses and treatments for patients, and can find employment in a variety of health care settings: doctors’ offices, HMOs, medical transcription services, clinics, insurance companies and various other medical-related agencies and organizations.

Learning Outcomes
Upon successful completion of all Medical Transcription certificate program requirements, graduates will
1. Create and modify standard types of business communications in both printed and electronic forms.
2. Demonstrate strong interpersonal and human relations skills required for success in a professional setting.
3. Execute medical office procedures used in today's technological work environment.
4. Demonstrate correct medical terminology in transcribing various documents.
5. Acquire up-to-date technology skills in the area of word processing.
6. Demonstrate keyboarding and data-entry speed and accuracy using industry accepted methods.
7. Understand and adhere to the importance of federal regulation, medical ethics, legal implications, and patient confidentiality when handling protected health information.

Required Courses
- BOT* 111: Keyboarding for Info Pro I 3 Credits
- BOT* 280: Medical Transcription and Document Production 3 Credits
- BIO* 115: Human Biology 4 Credits
- BOT* 180: Medical Terminology 3 Credits
  Subtotal: 13
- BOT* 137: Word Processing Applications 3 Credits or
- BOT* 112: Keyboarding for Info Pro II 3 Credits
- BOT* 122: Writing Procedures 3 Credits or
  Cross-listed courses (choose one)
- BOT* 139: Grammar, Usage and Style 3 Credits
- ENG* 203: Grammar, Usage and Style 3 Credits
- BOT* 289: Practical Pharmacology for the Medical Office 3 Credits
  Subtotal: 12
- BOT* 286: Medical Machine Transcription 3 Credits
- BOT* 296: Cooperative/Work Experience 3 Credits or
- BOT* 220: Computerized Communication 3 Credits
  Subtotal: 3

Total Credits Required: 28
Business Office Technology Certificate - Office Support Specialist

Program Design
Business Office Technology certificate programs allow students to specialize in areas of interest and obtain entry-level office positions. Course credit may be applied toward an associate degree. Advanced placement in keyboarding is available for students with prior training. Students can modify their programs depending upon experience. These certificate programs may be taken on a full- or part-time basis. They are designed for high school graduates, persons desiring to reenter the work place and college graduates seeking employment.

Curriculum
This certificate program is recommended for students interested in upgrading their skills to become more marketable in an increasingly technological work environment. Coursework focuses on business writing, office procedures, and computer applications providing students with the skills necessary to secure entry-level administrative employment opportunities.

Learning Outcomes
Upon successful completion of all Office Support Specialist certificate program requirements, graduates will

1. Create and modify standard types of business communications in both printed and electronic forms.
2. Demonstrate strong interpersonal and human relations skills required for success in a professional setting.
3. Execute business office procedures used in today's technological work environment.
4. Perform and analyze office accounting tasks and activities.
5. Acquire up-to-date technology skills in the following areas: word processing, spreadsheet, database, presentation, computerized accounting, personal information management, web technologies, and speech recognition.
6. Demonstrate keyboarding and data-entry speed and accuracy using industry accepted standards.

Required Courses
- BOT* 164: Office Accounting 3 Credits or
- ACC* 115: Financial Accounting 4 Credits
- BOT* 230: Microsoft Office Suite Applications 3 Credits or
- CSA* 105: Introduction to Software Applications 3 Credits
- BOT* 111: Keyboarding for Info Pro I 3 Credits
- BOT* 122: Writing Procedures 3 Credits
- CST* 114: Web Essentials 3 Credits

Subtotal: 15-16

- BOT* 112: Keyboarding for Info Pro II 3 Credits or
- BOT* 137: Word Processing Applications 3 Credits
- ACC* 121: Introduction to Accounting Software 1 Credits
- BOT* 220: Computerized Communication 3 Credits
- BOT* 231: Advanced Microsoft Office Applications 3 Credits
- BOT* 251: Administrative Procedures 3 Credits
- CSA* 135: Spreadsheet Applications 3 Credits

Subtotal: 16

Total Credits Required: 31-32
Computer Maintenance Technology Certificate

Program Design
The Computer Maintenance Technology certificate program is for students seeking specific skills in the installation, configuration and maintenance of computers and basic-to-complex computer networks. Students will acquire background and skills to enable them to understand and work with digital machines connected to networks. Students will learn to: install, configure, maintain and upgrade stand-alone computers or computers within networks; troubleshoot basic hardware and software problems on computers and within computer networks; understand the fundamentals of computer operating systems; describe and understand the basic technologies used in local and wide area networks, including logical and physical technologies as well as hardware and software associated with computer networks; and demonstrate sufficient knowledge in computer and computer networking technology to secure career placement in the field. Classroom discussion is supplemented with hands-on computer network laboratory experience and projects.

The Computer Maintenance Technology certificate will also begin to prepare students for the CompTIA, Microsoft and CCNA certification exams.

Curriculum
Students may enroll in this program full- or part-time. Courses are offered during daytime and/or evening hours. Students who complete the Computer Maintenance Technology Certificate program and decide to pursue an associate in science degree may apply all of their credits towards the Computer Network Technology A.S. degree program. Students should consult with a computer science/technology faculty advisor to plan their program and schedule of classes, and to discuss required course prerequisites.

Learning Outcomes
Upon successful completion of all Computer Maintenance Technology certificate program requirements, graduates will

1. Differentiate and understand the role and function of various current and emerging technologies, including, but not limited to, computer hardware and networking.
2. Describe basic computer organization and the relationship between hardware components and the operating system.
3. Differentiate and apply the basic technologies used in local- and wide-area networks.
4. Demonstrate skills in installation, configuration, maintenance, troubleshooting and upgrade of computer operating systems at both the workstation and server levels.
5. Demonstrate competency in installing, repairing, servicing, troubleshooting and upgrading computers and peripheral equipment from the PC technician’s point of view.
6. Demonstrate proficiency in installation, maintenance, upgrade and troubleshooting of computer operating systems from the PC technician’s point of view.

Required Courses
- CST* 131: Networking Theory & Application 4 Credits
- CST* 237: SysAdmin I - Client/Server 4 Credits
- CST* 238: SysAdmin II - Client/Server 4 Credits
- CSC* 124: Programming Logic and Design with Python 3 Credits
- CST* 141: Computer Hardware 4 Credits
- CST* 201: Introduction to MIS 3 Credits

Total Credits Required: 22
Computer Network Technology Certificate

Program Design
The Computer Network Technology certificate program is for students seeking a broad and in-depth knowledge of the theory, design, installation, configuration, maintenance and administration of basic-to-complex computer networks. Students will acquire background and skills to enable them to understand and work with digital machines from microprocessors to microcomputers to mainframe systems configured in local-area network or wide-area network configurations. Students will learn to: describe and understand the various aspects of computer network operating systems and their design and implementation; describe and understand the theory involved in computer networks; describe and understand the basic technologies used in local- and wide-area networks, including logical and physical technologies as well as hardware and software associated with computer networks; demonstrate a working knowledge of computer networks by describing design and technologies used in computer networks including: transmission media, topologies, protocols, interface performance analysis, bridges, gateways, data integrity, and network security; and demonstrate sufficient knowledge in computer network theory, technology, and administration to secure career placement in the field. Classroom discussion is supplemented with “hands-on” computer network laboratory experience and projects. The Computer Network Technology certificate will also begin to prepare students for the CompTIA, Microsoft and CCNA certification exams.

Curriculum
Students may enroll in this program full- or part-time. Courses are offered during daytime and/or evening hours. Students who complete the Computer Network Technology certificate program and decide to pursue an associate in science degree may apply all of their credits towards the Computer Network Technology A.S. degree program. Students should consult with a computer science/technology faculty advisor to plan their program and schedule of classes, and to discuss required course prerequisites.

Learning Outcomes
Upon successful completion of all Computer Network Technology certificate program requirements, graduates will
1. Differentiate and understand the role and function of various current and emerging technologies, including, but not limited to, computer hardware, networking, programming, and database and Internet technologies.
2. Describe basic computer organization and the relationship between hardware components and the operating system.
3. Describe the essential operating system components and the operating services.
4. Differentiate and apply the basic technologies used in local- and wide-area networks.
5. Demonstrate and implement advanced networking infrastructure concepts.
6. Demonstrate the use of appropriate tools to administer and troubleshoot server and client computers on a network.
7. Demonstrate skills in installation, configuration, maintenance, troubleshooting and upgrade of computer operating systems at both the workstation and server levels.
8. Demonstrate competency in installing, repairing, servicing, troubleshooting and upgrading computers and peripheral equipment from the PC technician’s point of view.

Required Courses
- CST* 131: Networking Theory & Application 4 Credits
- CST* 237: SysAdmin I - Client/Server 4 Credits
- CST* 238: SysAdmin II - Client/Server 4 Credits
- CST* 132: Networking Infrastructure 3 Credits
- CST* 277: Network Security Implementation 4 Credits
- CSC* 124: Programming Logic and Design with Python 3 Credits
- CST* 141: Computer Hardware 4 Credits
- CST* 201: Introduction to MIS 3 Credits

Total Credits Required: 29
Computer Programming Technology Certificate

Program Design
The Computer Programming Technology certificate program provides students with broad and in-depth knowledge of the theory, design and applications of digital computers and information processing technologies with a particular emphasis on programming skills. Students will acquire the background and skills to enable them to work with digital machines from microprocessors to microcomputers to mainframe systems configured in local-area network or wide-area network configurations. Students will learn: the concepts of efficient programming design, both traditional and object-oriented; to understand the role and function of computers and learn to effectively use the computer to solve complex problems; to describe and understand the various aspects of computer operating systems; to design, code, run and debug computer programs in the predominant computer industry and Internet programming languages (C++, Visual Basic, Java); to understand good database design by designing, developing forms and reports, and writing the code to prepare working databases; and to apply critical thinking and analytical skills to the computer programming solution of complex problems. Classroom discussion is supplemented with “hands-on” computer laboratory programming experience and problem-solving programming projects.

Curriculum
Students may enroll in this program full- or part-time. Courses are offered during daytime and/or evening hours. Students who complete the Computer Programming Technology certificate program and decide to pursue an associate in science degree may apply all of their credits towards the Computer Programming Technology A.S. degree program. Students should consult with a computer technology faculty advisor to plan their program and schedule of classes, and to discuss required course prerequisites.

Learning Outcomes
Upon successful completion of all Computer Programming Technology certificate program requirements, graduates will

1. Demonstrate the ability to understand a problem and develop logically structured solutions through the use of flowcharts, pseudo-code and C++ code.
2. Differentiate and understand the role and function of various current and emerging technologies, including, but not limited to, computer hardware, networking, programming, database and Internet technologies.
3. Describe basic computer organization and the relationship between hardware components and the operating system.
4. Identify and apply the major concepts and language requirements to design, code, execute and debug programs in the required programming languages.
5. Demonstrate an understanding of proper database design. Apply System Development Life Cycle concepts to plan, design, develop and implement a database.

Required Courses

- CSC* 124: Programming Logic and Design with Python 3 Credits
- CSC* 125: Programming Logic and Design with C++ 3 Credits
- CSC* 215: Object-Oriented Programming with C++ 4 Credits
- CSC* 241: Data Structures and Algorithms 4 Credits
- CSC* 205: Visual Basic .NET I 3 Credits
- CSC* 230: Database Concepts with Web Application 3 Credits
- CST* 201: Introduction to MIS 3 Credits

Total Credits Required: 23
Computer-Aided Design (CAD) Certificate

Program Design
The Computer-Aided Design (CAD) certificate program provides students with career-based training in mechanical design using computer-aided drafting/design technology. To provide the necessary technical education base, the program also includes education and training in applied technical mathematics, engineering drawing, and geometric dimensioning and tolerancing skills. Basic training in computer technology is included to prepare students for the two-dimensional, three-dimensional and solid-modeling computer-aided design technology in the program. CAD technology in the core of the certificate program is AutoCAD integrated with Pro/ENGINEER solid-modeling and rendering technology, both predominant technology leaders in CAD/solid-modeling. All technical manufacturing and engineering design in today’s high-technology business and industry uses computer-based, computer-aided design technologies that integrate the design, engineering and manufacturing design analysis—and manufacturing of complex products and product parts, sub-assemblies, and assemblies—into a single, technically coherent process.

Curriculum
Students may enroll in this program full- or part-time. Courses are offered during daytime and/or evening hours. Students who complete the Computer-Aided Design (CAD) certificate program and decide to pursue an associate in science degree may apply all of their credits towards the Industrial Technology A.S. degree program or the Connecticut College of Technology Technological Studies A.S. degree pathways program, both of which are articulated technology programs within Central Connecticut State University’s School of Engineering and Technology. Students should consult with an engineering/technology faculty advisor to plan their program and schedule of classes, and to discuss required course prerequisites.

Learning Outcomes
Upon successful completion of all Computer-Aided Design certificate program requirements, graduates will
1. Interpret complex engineering drawings including geometric dimensioning and tolerancing.
2. Perform competently in solving technical manufacturing and engineering mathematics problems.
3. Exhibit competency in two-dimensional, three-dimensional and solid-modeling skills as applied to complex computer-aided design technology.
4. Demonstrate an understanding of the role and function of computers and effectively use the computer to solve complex technical problems.

Required Courses
- EGR* 112: Engineering Drawing Interpretations 3 Credits
- MFG* 239: Geometric Dimension and Tolerancing 3 Credits
- CAD* 110: Introduction to CAD 3 Credits
- CAD* 218: CAD 3d Mechanical (AutoCAD) 3 Credits
- MFG* 205: Principles of CNC with Mastercam 3 Credits or
- CAD* 220: Parametric Design (Solidworks) 3 Credits

Total Credits Required: 15
Criminal Justice Certificate - Corrections

Program Design

The program helps prepare students for entry into the State of Connecticut’s Department of Correction as a Correctional Trainee.

Learning Outcomes

Upon successful completion of all Corrections certificate program requirements, graduates will
1. Explain the history and development of the system of corrections in America and around the world.
2. Explain contemporary correctional issues, including but not limited: prisoner rights, overcrowding, prison construction, gangs and “families” hierarchy, early release programs/recidivism, cost of correctional programs/buildings, and changing the emphasis of corrections from punishment/security to rehabilitation/treatment.
3. Explore the sociological/economic effects of privatization in our correctional institutions.
4. Identify and explore the problems and concerns of managing staff and inmates in a modern day correctional institution on both the federal and state levels.

Required Courses

- COM* 173: Public Speaking 3 Credits
- CJS* 102: Introduction to Corrections 3 Credits
- ENG* 101: Composition 3 Credits
- CJS* 240: Correctional Administration 3 Credits
- CJS* 293: CJ Cooperative Education/Work Experience 3 Credits or CJS* 289: Careers in Criminal Justice 3 Credits
- Any CJS* course 1-3 credits

Total Credits Required: 16-18
Criminal Justice Certificate - Criminal Justice

Program Design
This certificate offers those employed, or desiring to be employed, in law enforcement a way to improve career opportunities and placement through academic study.

Learning Outcomes
Upon successful completion of all Criminal Justice certificate program requirements, graduates will

1. Demonstrate a general understanding and appreciation of the role of the criminal justice system at local, state, and federal levels.
2. Demonstrate knowledge of appropriate ethics and the capability to critically and reflectively engage ethical issues in criminal justice, particularly questions of social responsibility and professional decision-making.
3. Demonstrate knowledge of the theories, principles, judicial and correctional processes, legal institutions, and methods of law enforcement.
4. Demonstrate a sound basic education in criminal justice for graduates who choose to pursue a bachelor's degree.

Required Courses
- CJS* 101: Introduction to Criminal Justice 3 Credits
- CJS* 211: Criminal Law I 3 Credits
- CJS* 220: Criminal Investigation 3 Credits
- POL* 111: American Government 3 Credits or
- POL* 112: State and Local Government 3 Credits
- SOC* 101: Principles of Sociology 3 Credits or
- PSY* 111: General Psychology I 3 Credits

Subtotal: 15

- CJS* 105: Introduction to Law Enforcement 3 Credits
- CJS* 120: Police and the Community 3 Credits
- CJS* 213: Evidence & Courtroom Procedure 3 Credits
- POL* 212: Constitutional Law and Civil Rights 3 Credits
- SOC* 240: Criminology 3 Credits or
- SOC* 241: Juvenile Delinquency 3 Credits or
- SOC* 242: Sociology of Deviance 3 Credits or Cross-listed courses (choose one)
- PSY* 217: Psychology of Criminal Behavior 3 Credits
- CJS* 272: Social Psychology of Criminal Behavior 3 Credits

Subtotal: 15

Total Credits Required: 30
Criminal Justice Certificate - Forensic Science

Program Design

The Forensic Science certificate program is designed for students who want to obtain knowledge in the area of forensics for their work in criminal investigation. The certificate is recommended for students who are already working in the field of criminal investigation, those who would like to specialize in this area, or those who have a particular interest in the field of study.

Learning Outcomes

Upon successful completion of all Forensic Science certificate program requirements, graduates will

1. Define forensic science and describe its importance in criminal investigation.
2. Define physical evidence and how it is used to provide investigative leads.
3. Describe the various approaches to different types of crime scenes.
4. Define specialized fields of forensic sciences.
5. Collect evidence at crime scenes, including photographic evidence.
6. Examine forensic evidence including fingerprints and firearms evidence.
7. Reconstruct shooting-related cases and measure bullet trajectories.
8. Interpret blood stain patterns at crime scenes.

Required Courses

- CJS* 225: Forensic Science I 3 Credits
- CJS* 226: Forensic Science II 3 Credits
- CJS* 220: Criminal Investigation 3 Credits
- CJS* 213: Evidence & Courtroom Procedure 3 Credits
- PSY* 217: Psychology of Criminal Behavior 3 Credits
- POL* 111: American Government 3 Credits or
- POL* 112: State and Local Government 3 Credits
- CHE* 111: Concepts of Chemistry 4 Credits or
- BIO* 115: Human Biology 4 Credits
- Elective Criminal Justice 3 Credits
- CJS* 227: Forensic Photography 3 Credits

Total Credits Required: 28
Criminal Justice Certificate - Homeland Security

Program Design
The Homeland Security certificate program offers students an in-depth understanding of the issues and concerns surrounding homeland security and emergency management. This certificate also provides students with practical solutions in the management of natural and man-made threats and emergency events. Upon completion of the certificate, students will be better equipped to lead their agency, department, organization, company and community in the preparedness, response, recovery and mitigation of both natural and man-made disasters. The Homeland Security certificate is Manchester Community College’s answer to the growing need of trained professionals in the area. It provides the learner with the up-to-date technical and theoretical training required to fulfill the increasing demands of emergency providers.

Learning Outcomes
Upon completion of the all Homeland Security certificate program requirements, students will be able to:
1. Demonstrate an understanding of the nature and extent of the terrorist threat to the United States, including the motives and methods of various foreign and domestic terrorist organizations.
2. Analyze and study the historical and political efforts of terrorist cell groups.
3. Gain knowledge and understanding of the proactive and reactive responses to a variety of scenarios by law enforcement, judicial agencies, intelligence organizations and the military.
4. Study and analyze historical, ideological, and cultural differences among a variety of foreign and domestic terrorist groups.
5. Understand the legal and ethical challenges presented by efforts to control various terrorist threats through border control, surveillance, detention, interrogation and disciplinary actions.
6. Demonstrate an understanding of the challenges presented to the various domestic agencies charged with maintaining the security of the homeland and responding to natural disasters.
7. Demonstrate an understanding of organizational design, management and inter-agency coordination and cooperation at the local, state and national level in response to natural and man-made disasters.
8. Develop an understanding of response incidents through academic and pragmatic scenarios.

Required Courses
- CJS* 101: Introduction to Criminal Justice 3 Credits
- CJS* 106: Introduction to Homeland Security 3 Credits
- PHL* 111: Ethics 3 Credits
- CJS* 160: Introduction to Emergency Management 3 Credits
- CJS* 220: Criminal Investigation 3 Credits
- CJS* 133: Police Response to Tactical/Hostile Situations 1 Credits

Total Credits Required: 16
Culinary Arts Certificate - Culinary Arts

Program Design
The Culinary Arts certificate program is designed for both full- and part-time students pursuing a career in commercial food preparation. Academic credits from this program may be transferred to MCC’s associate degree programs in Culinary Arts, Foodservice Management or Hotel-Tourism Management. Students have also earned advanced placement status in the Culinary Arts program at Johnson & Wales University and at the New England Culinary Institute.

Classroom, laboratory and volume food experience are combined in one of the largest and most comprehensively equipped foodservice laboratory facilities in Connecticut, including two commercial production kitchens and three dining rooms. Students participate in a 300-hour externship in a cooperative education environment that combines classroom theory with practical on-the-job training.

Students are required to purchase their own official kitchen and table service uniforms as well as culinary tools and cutlery.

Graduates from this program may apply to the American Culinary Federation (ACF) to become a Certified Cook, a nationally recognized certification.

Note: Students seeking certification from the American Culinary Federation should take HSP* 225: Advanced Pastry Arts III (3 credits).

Learning Outcomes
Upon successful completion of all Culinary Arts certificate program requirements, graduates will

1. Analyze theory and techniques of food preparation and presentation.
2. Analyze theory and techniques of baking and pastry arts.
3. Prepare menus, incorporating costs, acquisition and inventory controls.
4. Summarize basic principles and concepts of the hospitality industry.
5. Create and cater events.
6. Prepare basic foods in quantity, including various regional foods.
7. Prepare ethnic cuisine in quantity.
8. Evaluate the establishment and maintenance of a safe and sanitary foodservice operation including Hazard Analysis Critical Control Point and State of Connecticut law.
9. Set-up and operate the ‘front of the house.’
10. Summarize managerial techniques and human resource management practice.
11. Demonstrate appropriate problem-solving techniques in addressing management problems.

Required Courses
- HSP* 101: Principles of Food Preparation 3 Credits
- HSP* 112: Advanced Food Preparation 4 Credits
- HSP* 108: Sanitation and Safety 3 Credits
- HSP* 103: Principles of Baking I 3 Credits
  Subtotal: 13

- HSP* 296: Cooperative Education/Work Experience 3 Credits
  Subtotal: 3

- BIO* 111: Introduction to Nutrition 3 Credits
- HSP* 210: Buffet Catering 4 Credits
- HSP* 215: Principles of Baking II 3 Credits
- HSP* 201: International Foods 4 Credits
  Subtotal: 14

Total Credits Required: 30
Culinary Arts Certificate - Food Store

Program Design

The Food Store certificate program gives students the opportunity to begin to formalize the training they receive in supermarkets. In addition, it provides them with additional education and skills in the areas of food preparation, sanitation, customer service and management. Students who obtain the Food Store certificate are able to pursue additional education in Foodservice Management or a business field. Graduates also have advantage when competing for management positions and training within supermarket corporations.

Learning Outcomes

Upon successful completion of all Food Store certificate program requirements, graduates will
1. Describe the history, development and classifications of the modern food store industry.
2. Analyze the food store operations with regards to its segments and divisions, including meat management, produce management, deli operations, bakery operations and grocery management.
3. Evaluate issues and trends within the food store industry.
4. Analyze the role of service within the food store industry.
5. Evaluate general marketing and merchandising strategies.
6. Analyze the role of management in food store operations.

Required Courses

- HSP* 101: Principles of Food Preparation 3 Credits
- HSP* 112: Advanced Food Preparation 4 Credits or
- HSP* 233: Hospitality Human Resource Management 3 Credits
- HSP* 108: Sanitation and Safety 3 Credits
- HSP* 115: Food Store Systems 3 Credits
- HSP* 238: Relationship Marketing 3 Credits
- HSP* 296: Cooperative Education/Work Experience 3 Credits

Total Credits Required: 18-19
Culinary Arts Certificate - Professional Baker

Program Design

The Professional Baker certificate program is designed to further education and training for those already in the field, as well as accommodate people entering careers in the Culinary Arts. Course work in both the Professional Baker and Professional Cook certificate programs transfer to the Culinary Arts certificate program, enabling the student to become an American Culinary Federation (ACF) Certified Cook.

Learning Outcomes

Upon successful completion of all Professional Baker certificate program requirements, graduates will
1. Analyze theory and techniques of baking and pastry arts.
2. Evaluate the establishment and maintenance of a safe and sanitary foodservice operation including Hazard Analysis and Critical Control Point and State of Connecticut law.
3. Decorate layer cakes with molded and sculpted decorations.
4. Transfer acquired knowledge to the world of work.

Required Courses

- HSP* 108: Sanitation and Safety 3 Credits
- HSP* 107: Icing Artistry I 3 Credits
- HSP* 103: Principles of Baking I 3 Credits
- HSP* 215: Principles of Baking II 3 Credits

Subtotal: 12

- HSP* 296: Cooperative Education/Work Experience 3 Credits
- HSP* 216: Artisan Bread 3 Credits
- HSP* 225: Principles of Baking III 3 Credits
- HSP* 207: Icing Artistry II 3 Credits

Subtotal: 12

Total Credits: 24
Dental Assistant Certificate

Program Design

The objective of the Dental Assistant Certificate Program is to provide students with the knowledge and skills to obtain employment as a dental assistant in private dental practices or public health clinics. Graduates will be prepared to assist the dentist in both general dentistry and specialty chairside procedures, radiography and dental laboratory procedures along with front desk duties.

Scholastic Preparation and Admission Process

The Dental Assistant program relies on a selective admission process, which uses specific admissions criteria. These criteria are available through the Mathematics, Science and Health Careers division office. The admission criteria require that the students are eligible for the equivalent of BIO* 115, PSY* 111, and COM* 173. Interested candidates will be expected to have a history of academic success. Admission to the Dental Assistant program requires a separate application. Complete information on specific criteria for acceptance and the admission process is available from the Mathematics, Science and Health Careers division office at 860-512-2704.

Accreditation

The program is currently seeking accreditation as a new program.

Curriculum

The program begins each September and continues through two semesters. In each semester of the program, students will train at offices and clinics in conjunction with classes held at the college. All clinical training is supervised by trained clinical instructors. Due to standards set by the Joint Commission on Accreditation of Healthcare Organizations (JCAHO), students are advised that the healthcare facilities to which they are assigned for clinical rotations may require that they submit to a criminal background check before beginning their clinical experiences. Manchester Community College cannot be responsible for finding an alternate clinical placement for a student who fails to pass the background check. Students are advised to meet with an MCC Counselor to discuss degree completion requirements.

The program will prepare students for the Radiation Health and Safety and the Infection Control components of the Dental Assisting National Board (DANB) exams which grant the credential of Certified Dental Assistant (CDA). Although the State of Connecticut does not require dental assistants to be certified, it is a requirement that all dental assistants exposing radiographs possess radiation health and safety certification through DANB.

A physical examination and an immunization record are required of all students prior to beginning clinical rotations. Students are responsible for parking fees; uniforms; clinical supplies and miscellaneous expenses.

Learning Outcomes

Upon successful completion of all Dental Assistant Certificate Program requirements, graduates will:

- Demonstrate acquired knowledge and skills necessary to obtain an entry level position as a dental assistant.
- Demonstrate professionalism and effective communication.
• Be prepared for the Radiation Health and Safety component of the Dental Assisting National Board Examination to become qualified to take dental x-rays in the state of Connecticut.
• Be prepared for the Infection Control Examination component of the Dental Assisting National Board Examination.
• Demonstrate acquired knowledge and skills as a chairside dental assist. Upon meeting the eligibility requirements of the Dental Assisting National Board Examination, be prepared for the chairside component of the Dental Assisting National Board Examination.
• Upon successful completion of all three components of the Dental Assisting National Board Examination, earn the national distinction of Certified Dental Assistant (CDA).
• Be introduced to the employment opportunities available in the field of dental assisting.

**Required Courses**

- **BIO* 115: Human Biology** 4 Credits  
- **PSY* 111: General Psychology I** 3 Credits  
- **COM* 173: Public Speaking** 3 Credits

Subtotal: 10

- **DAS* 123: Chairside Dental Assisting** 4 Credits  
- **DAS* 131: Oral Anatomy and Pathophysiology** 3 Credits  
- **DAS* 136: Infection Control in Dentistry** Credits

Subtotal: 8

- **DAS* 132: Dental Materials** 4 Credits  
- **DAS* 133: Dental Radiography** 4 Credits  
- **DAS* 134: Oral Health Promotion** 1 Credits

Subtotal: 9

- **DAS* 135: Dental Practice Management** 1 Credits  
- **DAS* 200: Dental Assistant Clinical Practicum** 3 Credits

Subtotal: 4

**Total Credits Required: 31**
Disability Specialist Certificate

Program Philosophy
People with disabilities are an integral part of the community and should receive necessary community-based supports. This certificate program provides a concentration in on-the-job training in direct service situations, as well as specialized courses that relate to developmental disabilities.

Learning Outcomes
With the addition of experience in the field of disability and upon successful completion of all Disability Specialist certificate program requirements, graduates will

1. Define and discuss basic definitions, causes, psychological characteristics and educational approaches relevant to children with disabilities.
2. Discuss how children and adults with disabilities have unique abilities rather than limitations.
3. Compare various learning theories and their application to children and adults with disabilities.
4. Demonstrate an understanding of ethical standards including confidentiality.
5. Define ethical standards in the disability field and demonstrate confidentiality in written and oral assignments.

Required Courses

- HSE* 101: Introduction to Human Services 3 Credits
- HSE* 210: Group & Interpersonal Relations 3 Credits
- PSY* 111: General Psychology I 3 Credits
- PSY* 163: Children with Disabilities 3 Credits
- PSY* 183: Learning Process and Disabilities 3 Credits

Subtotal: 15

- HSE* 251: Work with Individuals and Families 3 Credits
- HSE* 241: Human Services Agencies and Organizations 3 Credits
- HSE* 294: Disability Specialist Seminar 1 Credits
- PSY* 164: Assistive Technology for Students with Disabilities (K-12) 1 Credits
- PSY* 173: Adults with Disabilities 3 Credits
- PSY* 174: Assistive Technology for Adults in the Workplace, Home and Community. 1 Credits
- PSY* 193: Issues/Trends in Disabilities 3 Credits

Subtotal: 15

Total Credits Required: 30
Early Childhood Education Child Development
Associate Certificate

Program Design
The Child Development Associate (CDA) credential training program is a two-semester, 12-credit program for child care teachers who want to enhance their professional skills and learn more about the development of young children. The program emphasizes practical information that can be used in working with young children. Students learn how to observe children and plan developmentally appropriate activities and to design safe, healthy learning environments. They learn to work effectively with families, and to support and encourage children’s social, emotional, physical and intellectual development.

Curriculum
Students must meet the following eligibility requirements to enroll in the CDA certificate program: they must be 18 years of age, hold a high school diploma or its equivalent, be currently employed or regularly volunteer in a state-licensed child care program, meet state immunization requirements and successfully complete an interview with the CDA program coordinator.

Learning Outcomes
Upon successful completion of all Child Development Associate certificate program requirements, graduates will
1. Support young children in early childhood programs using skills in observation, documentation, assessment and application.
2. Plan, implement, and evaluate developmentally appropriate lesson/activity plans that foster children’s social, emotional, physical and intellectual development and involve families.
3. Demonstrate effective teaching strategies in an early childhood program, based upon child development theory and family involvement principles, which include setting up the learning environment; letting children practice skills and ideas; interacting positively with children, colleagues, and families; and modeling behavior we want children to emulate.
4. Evaluate the quality of an early childhood program through curriculum activities, routines, and teacher and child engagement; the learning environment; teacher/child interaction; and family involvement.

Required Courses
- ECE* 222: Methods and Techniques in Early Childhood Education 3 Credits
- ECE* 103: Creative Experiences/Children 3 Credits
- ECE* 290: Student Teaching I 3 Credits
- ECE* 291: Student Teaching II 3 Credits

Total Credits Required: 12
Electronic Publishing Certificate

Program Design

The Electronic Publishing certificate program develops students’ competency in computer-assisted design and production of brochures, fliers, newsletters and related materials. Students will attain the skills needed to perform electronic publishing duties in a variety of business and public relations settings. This program is ideal for those who work in public relations and advertising communications and wish to achieve computer fluency.

Electronic publishing students will take six credit hours on the Apple Macintosh, using programs such as InDesign to complete sophisticated projects. Students who wish to enter the program should have an interest in communications and/or graphics. Keyboard competency is necessary.

Curriculum

The certificate program can be completed in two or more semesters by enrolling full- or part-time.

Learning Outcomes

Upon successful completion of all Electronic Publishing certificate program requirements, graduates will

1. Develop, write and design brochures, newsletters and related print material.
2. Demonstrate the writing conventions associated with technical reports and other institutional publications.
3. Write articles in an acceptable journalistic style.
4. Understand the principles of graphic design and apply design techniques to a variety of documents.
5. Effectively use the Macintosh computer and design-related software.

Required Courses

- COM* 222: Reporting and Writing News Stories. 3 Credits
- COM* 213: Electronic Publishing 3 Credits or
- DGA* 111: Introduction to Computer Graphics 3 Credits
- DGA* 212: Advanced Computer Graphics 3 Credits
- ENG* 101: Composition 3 Credits
- ENG* 202: Technical Writing 3 Credits
- GRA* 151: Graphic Design 1 3 Credits

Total Credits Required: 18
Entrepreneurship/Small Business Certificate

Program Design
This program will provide students the technical skills associated with becoming an entrepreneur, and/or a small business owner. This program will give students the option of gaining more concentrated knowledge in this discipline. The student will be able to pursue a career or apply courses to an associate in science degree. This certificate will prepare the student with the tools necessary to develop and start their own business. If one is considering opening their own business, regardless of their program of study, this certificate will help them get started.

This certificate is available to students wishing to take their courses completely online.

Courses are scheduled so that the certificate may be completed in less than eight months, provided that students are able to take courses in the summer and winter intercessions.

Curriculum
The courses within this certificate are available both as on-ground and online courses.

Learning Outcomes
Upon successful completion of all Entrepreneurship/Small Business certificate program requirements, graduates will

1. Apply accounting concepts and critical thinking skills to produce accurate financial statements.
2. Apply basic principles of the legal system to the operations of American business using analytical and critical thinking skills and describe the role of fiduciary duties and ethical and social responsibilities from the perspective of decision-makers and stakeholders using principles of tort law, criminal law and government regulation.
3. Understand marketing methods and institutions, including analysis and interrelationship of the marketing mix with consumer behavior, technology, and an ever-changing business climate and marketing environment.
4. Demonstrate proficiencies in reading, writing, listening, and presentation and analytical skills.
5. Work with others, including culturally and intellectually diverse people; think critically; and gain an appreciation for life-long learning.
6. Demonstrate an understanding of the interrelationships between business courses.
7. Understand the classification of what determines a small business and recognize the vital role small business plays in our economy.
8. Determine the differences between starting a business, buying an existing business and opening a franchise.
9. Apply decision-making skills by exploring opportunity analysis and developing a potential business opportunity.
10. Identify and properly utilize competitive advantages within existing small businesses;
11. Demonstrate an understanding how a small business owner properly prepares for and manages growth.

Required Courses
- ACC* 115: Financial Accounting 4 Credits
- BMK* 201: Principles of Marketing 3 Credits
- BES* 218: Entrepreneurship 3 Credits
- BES* 219: Management and Growth - Small Business 3 Credits
- BBG* 234: Legal Environment of Business 3 Credits
- Choose one:
  - CST* 201: Introduction to MIS 3 Credits or
  - BMK* 220: Sales 3 Credits or
  - ACC* 125: Accounting Computer Applications I 3 Credits

Total Credits Required: 19
Fitness Specialist Certificate

Program Design
Fitness specialists typically work for organizations, such as universities, health clubs, professional gymnasiums, resorts, country clubs and hospitals. They work with individuals and groups to help improve clients' fitness levels or to rehabilitate injuries. Some fitness specialists may hold personal training sessions at a gym or in clients' homes, in which they help clients reach personal fitness goals.

Before performing an exercise program, fitness specialists assess the physical condition of the participants. They lead warm-up activities, like stretching, and run through an entire exercise program. A fitness specialist may assist or offer suggestions to individuals who are having difficulty. In addition to exercise duties, a fitness specialist also performs administrative work, which may include leading tours of fitness facilities, registering new members, monitoring the front desk, writing articles or supervising exercise rooms.

Curriculum
Fitness Specialist courses are offered in the regular semester and in an 8 week accelerated format. All of the credits in the certificate program can be used to fulfill requirements for the Associate Degree in Health and Exercise Science for students who wish to pursue advanced study. Students should consult with an advisor to discuss course requirements and prerequisites.

Learning Outcomes
Upon successful completion of all Fitness Specialist certificate requirements, graduates will

1. Acquire the knowledge and skills necessary to obtain an entry level position as a fitness or wellness specialist.
2. Demonstrate professional appearance, conduct and effective communication skills.
3. Be eligible and prepared to pass a national examination in order to qualify as a Certified Personal Trainer.
4. Be knowledgeable about the employment opportunities available in the fitness field.

Required Courses

- HPE* 210: Sports Nutrition 3 Credits
- HLT* 151: Health and Wellness Promotion 3 Credits
- HPE* 102: Human Performance and Fitness 3 Credits
- HPE* 240: Principles of Fitness 3 Credits
- HPE* 242: Introduction to Athletic Training 3 Credits
- HPE* 116: Weight Training 1 Credits
- HPE* 211: Fitness Specialist Certification 1 Credits

Total Credits Required: 17
Gerontology Certificate

Program Design

The Gerontology certificate program is designed for persons who seek short-term academic and in-service professional development, and for those with experience working with senior citizens or who have an academic degree in a related area. Students working toward a certificate in gerontology should consult with an advisor or counselor before planning the total program.

Curriculum

Students may enroll in the certificate program full- or part-time.

Learning Outcomes

Upon successful completion of all Gerontology certificate program requirements, graduates will
1. Comprehend the physiological, psychological and socio-economic factors relating to the aging process.
2. Demonstrate the ability to comprehend the needs of an elderly person and identify sources of assistance to meet those needs.
3. Demonstrate the ability to identify the need for advocacy for the elderly and sources of assistance.
4. Identify factors necessary for successful aging.
5. Demonstrate interpersonal and communication skills necessary to work in a health care or community-based setting serving an elderly population.

Required Courses

- HSE* 101: Introduction to Human Services 3 Credits
- HSE* 251: Work with Individuals and Families 3 Credits
- PSY* 210: Death and Dying 3 Credits
- GERN 161: Aging America: Issues and Dilemmas 3 Credits
- SSC* 294: Cooperative Education/Work Experience 3 Credits
- PSY* 111: General Psychology I 3 Credits
- RLS* 223: Leisure and Aging 3 Credits
- HLT* 151: Health and Wellness Promotion 3 Credits
- SOC* 101: Principles of Sociology 3 Credits
- PSY* 125: Psychology of Aging and Mental Health 3 Credits

Total Credits Required: 30
Health Career Pathways Certificate

Program Design
This program is designed to assist the student to achieve success in health care programs. Students will be provided with the foundation necessary for health care professions. Credits from this program may be applied toward health care programs requirements within Connecticut’s community college system. However, completion of this program does not guarantee an automatic acceptance into any health care program. Students are responsible for verifying specific requirements of their program of interest.

Curriculum
Students may enroll in the program on a full- or part-time basis.

Learning Outcomes
Upon successful completion of all Health Career Pathways program requirements, graduates will
1. Demonstrate competence in written and oral communication.
2. Demonstrate critical thinking, logical reasoning and problem-solving skills.
3. Effectively use and interpret medical terminology.
4. Identify a variety of career opportunities and roles available in health care professions.
5. Meet most requirements for entrance into health care programs.
6. Demonstrate an understanding of the impact of psychological principles and how they relate to the health care field.
7. Use and apply scientific methods.

Required Courses

- HLT* 103: Investigations in Health Careers 3 Credits
- ENG* 101: Composition 3 Credits
- MAT* 138: Intermediate Algebra: A Modeling Approach 3 Credits
- BIO* 115: Human Biology 4 Credits or
- BIO* 121: General Biology I 4 Credits
- CHE* 111: Concepts of Chemistry 4 Credits
- PSY* 111: General Psychology I 3 Credits
- BIO* 211: Anatomy and Physiology I 4 Credits
- BIO* 212: Anatomy and Physiology II 4 Credits

Total Credits Required: 28

Note:

Participating colleges have prerequisites for above courses. Please consult the catalog at the community college you are attending for prerequisites and eligibility for the courses.
Hotel-Tourism Certificate

Program Design
Students will be exposed to a broad range of subjects covering the inter-related areas of the tourism industry, both by means of theoretical and practical work within the college, and by internships in recognized hotels, restaurants or related institutions, as an integral part of the program. The objective is to train students to a level of all-around competence in the varied operations of the hospitality industry by confronting students with the contemporary issues and challenges that face the industry and by developing their abilities to initiate and manage change and to produce a solid foundation on which a future management career may be built. Graduates will be prepared to embark upon their careers with confidence, armed with the knowledge, the basic experience and the interpersonal skills that will allow them to succeed in the hotel-tourism industry.

Learning Outcomes
Upon successful completion of all Hotel-Tourism certificate program requirements, graduates will
1. Analyze theory and techniques of food preparation and presentation.
2. Prepare menus incorporating costs, acquisition and inventory controls.
3. Evaluate the establishment and maintenance of a safe and sanitary food service operation including Hazard Analysis and Critical Control Point (HACCP) and State of Connecticut law.
5. Demonstrate creativity and sound thinking in solving management problems.
6. Apply knowledge of computers to the hospitality industry.
7. Differentiate styles of marketing, sales analysis and planning for the hospitality industry.
8. Demonstrate the practical approach to the various aspects of food and beverage cost control and purchasing.
9. Outline the legal responsibilities and rights of guests and employees.
10. Interpret hospitality sales practices and market analysis from sales to actual activity.
11. Apply office procedures and forms necessary to room guests and control cash.
12. Apply techniques that enhance customer satisfaction and build loyalty.

Required Courses

- HSP* 101: Principles of Food Preparation 3 Credits
- ENG* 101: Composition 3 Credits
- HSP* 233: Hospitality Human Resource Management 3 Credits
- HSP* 237: Hospitality Marketing 3 Credits
- HSP* 211: Food and Beverage Cost Control 3 Credits
  **Subtotal: 15**
- HSP* 238: Relationship Marketing 3 Credits
- HSP* 242: Hotel Management 3 Credits
- GEO* 204: Geography and Tourism Development 3 Credits
- HSP* 108: Sanitation and Safety 3 Credits
- HSP* 296: Cooperative Education/Work Experience 3 Credits
  **Subtotal: 15**

**Total Credits: 30**

Division of Social Science and Hospitality: 860-512-2750

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Lean Manufacturing Certificate

Program Design

The Lean Manufacturing certificate program provides a detailed understanding of Lean practices in the industrial workplace for those planning on entering the workforce or for those looking to re-tool themselves in Lean principles. These principles seek to continuously improve all processes and reduce all unnecessary steps in any industrial or business operation making that operation as lean or efficient as possible. The curriculum was developed by leading experts in the field and combines both principles and theory with implementation in the workplace.

Learning Outcomes

Upon successful completion of all Lean Manufacturing certificate program requirements, graduates will

1. Apply appropriate mathematical and scientific principles to engineering and technology applications.
2. Demonstrate proficiency in technical fundamentals to analyze and resolve technology problems.
3. Apply knowledge and skills to develop, interpret and select appropriate technological and business processes using Lean principles.

Required Courses

- MFG* 171: Introduction to Lean Manufacturing 3 Credits
- MFG* 271: Advanced Lean Manufacturing 3 Credits

Total Credits Required: 6
Marketing Certificate

Program Design
The Marketing certificate program is designed for students who are interested in a career change or who already have a degree and are looking for a career specialty.

Curriculum
Students may enroll full- or part-time. Since some courses are not offered in both the fall and spring semesters, see an advisor about your schedule. Note: All business courses numbered 100 or higher require students to be eligible for ENG* 101 except BBG* 101, which requires students to be eligible for ENG* 093.

Learning Outcomes
Upon successful completion of all Marketing certificate program requirements, graduates will
1. Demonstrate relevant content knowledge in required core business disciplines (accounting, business law, management and organizational behavior, and marketing) and apply concepts in problem solving through identifying and evaluating alternative solutions and offering a well-supported conclusion.
2. Recognize proper business acumen and decorum in professional interactions, demonstrate appropriate interpersonal communication and presentation skills and demeanor, and demonstrate the ability to use presentation and team interpersonal skills effectively in class presentations.
3. Demonstrate the ability to identify situations that present ethical dilemmas and lapses and understand and apply the concepts related to ethics and the social responsibilities of businesses in order to respond thoughtfully.
4. Apply concepts in core accounting and business disciplines and demonstrate critical thinking skills to make sound business decisions.
5. Demonstrate an understanding of the interrelationships between accounting and business courses.
6. Demonstrate the ability to effectively present marketing and promotion plans and to make an effective sales presentation, all of which reflect an understanding of the target audience, environmental factors, and sound strategic decisions based on thorough research and an understanding of marketing and other business principles.

Required Courses
- BMG* 202: Principles of Management 3 Credits
- BMK* 201: Principles of Marketing 3 Credits
- BMK* 220: Sales 3 Credits
- BMG* 204: Managerial Communication 3 Credits
- ECN* 102: Principles of Microeconomics 3 Credits or
- MAT* 165: Elementary Statistics with Computer Applications 4 Credits
  Choose one
- PSY* 111: General Psychology I 3 Credits or
- ANT* 101: Introduction to Anthropology 3 Credits or
- SOC* 101: Principles of Sociology 3 Credits
  Choose two electives from the list below 6-8 Credits

Total Credits Required: 24-27

Electives: Select one of the following:
- BMK* 241: Principles of Advertising 3 Credits or
- BMK* 245: Integrated Marketing Communications 3 Credits or
- COM* 201: Introduction to Public Relations 3 Credits
  Select remaining elective from the following:
- BES* 218: Entrepreneurship 3 Credits
- BFN* 202: Corporate Finance 4 Credits
- CST* 201: Introduction to MIS 3 Credits
- DGA* 111: Introduction to Computer Graphics 3 Credits
- DGA* 240: Web Page Design 3 Credits
- ECN* 101: Principles of Macroeconomics 3 Credits
- ECN* 102: Principles of Microeconomics 3 Credits (If not already taken)
- MAT* 165: Elementary Statistics with Computer Applications 4 Credits (If not already taken)
Media Technology Certificate

Program Design
The Media Technology certificate program provides an intensive exposure to a range of current communication technologies. It is intended for students who are technically-oriented and wish to work in technical positions in the fields of radio, television, photography, desktop publishing and cable television. It concentrates on skills that are necessary for working behind-the-scenes in media and communications. Classes are highly practical and provide significant hands-on opportunity, allowing the student to apply classroom theory to real-life projects. In developing this certificate program, extensive effort was made to provide skills that are currently in high demand in the Connecticut labor market.

Curriculum
The program can be completed in two semesters of rigorous, full-time study, but will take longer for the student attending part-time.

Learning Outcomes
Upon successful completion of all Media Technology certificate program requirements, graduates will

1. Write copy for radio and television.
2. Effectively use the Macintosh computer and design-related software.
3. Understand and apply the basic principles of graphic arts and design techniques.
4. Operate still and video cameras and edit videotape.
5. Conduct interviews for newspaper stories and television programs.
6. Write scripts for radio and television programs.

Required Courses

- COM* 177: Broadcasting Performance 3 Credits or
- COM* 240: Broadcast/TV Production 4 Credits
- COM* 108: Contemporary Issues in Media 3 Credits
- COM* 213: Electronic Publishing 3 Credits
- COM* 242: Advanced Broadcast/TV Production 4 Credits
- COM* 295: Internship I 3 Credits
- COM* 247: Television Writing 3 Credits
- COM* 166: Video/Filmmaking 3 Credits
- ART* 185: Video/Filmmaking 3 Credits

Total Credits Required: 22-23

Note:
‡ Students may enroll in COM* 242 even if they have not taken COM* 241.
Paralegal Certificate

Program Design
The Paralegal certificate program is designed for students who have or will concurrently receive an educational (not vocational) associate or baccalaureate degree in a major other than paralegal or legal studies from an accredited institution. The certificate program provides them with the opportunity to enroll in a paralegal studies program that meets guidelines set by the American Bar Association. An option in the program is a cooperative education/work experience course in which students gain practical experience in a legal setting while earning academic credit. Students must submit official transcripts showing prior degrees must be sent directly to the Admissions office for review.

A paralegal or legal assistant is a person—qualified through education, training or work experience—who is employed or retained by a lawyer, law office, governmental agency or other entity. The paralegal performs specifically-delegated, substantive legal work, for which a lawyer is responsible. Paralegals may not provide legal services directly to the public except as permitted by law.

Paralegals may be asked to conduct research and prepare memoranda; to draft pleadings, deeds or contracts; to interview clients or witnesses; to prepare answers to interrogatories; or to digest depositions. They may prepare inventories, accounts and tax returns in connection with estates and trusts; perform real estate title searches and UCC searches; calendar and track important deadlines; or organize and maintain client files. Paralegals may not give legal advice or engage in the unauthorized practice of law.

The MCC Paralegal Certificate program has been approved by the American Bar Association since 1998. It is a member of the American Association for Paralegal Education.

The MCC Paralegal Association is a student club that offers networking opportunities and guest speakers to members.

Curriculum
The Paralegal program is primarily an evening program of study, offering legal courses during the academic year. Many students work full-time while attending classes at night. Students should note that not all courses are offered every semester, and only some courses are offered in the day. Part-time students should see a counselor for suggested course sequencing.

Note: Course prerequisites are listed in the course descriptions.

Learning Outcomes
Upon successful completion of all Paralegal certificate requirements, graduates will be able to:

1. Recognize and describe the proper role of the paralegal in the delivery of legal services to the public and apply the ethical rules that govern the conduct of the legal profession.
2. Demonstrate critical thinking, reasoning and analytical skills; conduct factual and legal research using print and computerized methods; and organize and present information effectively, both orally and in writing.
3. Describe the organization of the American legal system, apply procedural law to litigation and administrative agency law, and demonstrate substantive knowledge of principles of law.
4. Draft and interpret legal documents, including pleadings, deeds, mortgages, probate documents, court forms, business documents, and contracts for review by the supervising attorney.
5. Perform file and case management tasks in accordance with office policy and court procedures, using problem-solving, organizational and computer skills.
6. Recognize opportunities for professional development through continuing education and affiliation with professional organizations.
Required Courses

- BBG* 231: Business Law I or
- BBG* 234: Legal Environment of Business 3 Credits

- POL* 120: Introduction to Law 3 Credits
- LGL* 103: Legal Ethics and Professional Responsibility 1 Credits
- LGL* 220: Computer Applications in Law 4 Credits
- LGL* 209: Probate Practice 3 Credits

**Subtotal: 14**

- LGL* 102: Legal Research and Writing 3 Credits
- LGL* 104: Real Estate Practice 3 Credits
- LGL* 211: Business Organization 3 Credits
- LGL* 208: Litigation 3 Credits
- Legal Elective (Choose one from list)‡‡ 3 Credits

**Subtotal: 15**

**Total Credits Required: 29**

**Note:**

‡ Students without a strong foundation in computer skills should take CSC* 101 or BOT* 230 prior to enrolling in LGL* 220.

‡‡ Legal Electives
- LGL* 210: Family Law 3 Credits
- LGL* 212: Commercial Law 3 Credits
- LGL* 215: Environmental Law 3 Credits
- LGL* 216: Administrative Law 3 Credits
- LGL* 240: Legal Studies Capstone Course 3 Credits
- LGL* 270: Cooperative Education/Work Experience 3 Credits
Polysomnography Certificate

Program Design
The objective of the Polysomnography Certificate program is to provide students with the knowledge and skills to obtain employment as a Polysomnography Technician in sleep labs associated with medical practices and hospitals. Graduates will be prepared to assist the doctor in performing sleep test and in the interpretation of the data obtained during testing. The program will prepare students for the national examination offered by the Board of Registered Polysomnographic Technologists.

Scholastic Preparation and Admission Process
The Polysomnography Certificate program relies on a selective admission process, which uses specific admissions criteria. These criteria are available through the Mathematics, Science and Health Careers division office. The admission criteria require that the students are eligible for the equivalent of BIO* 115, MAT* 109, and ENG* 101. Interested candidates will be expected to have a history of academic success. Admission to the Polysomnography Certificate program requires a separate application. Complete information on specific criteria for acceptance and the admission process is available from the Mathematics, Science and Health Careers division office at 860-512-2704.

Accreditation
The program is currently seeking accreditation as a new program.

Curriculum
The program begins each September and continues through two semesters. In each semester of the program, students will train at the hospitals in conjunction with classes held at the college. All hospital training is supervised by trained clinical instructors. Due to standards set by the Joint Commission on Accreditation of Healthcare Organizations (JCAHO), students are advised that the healthcare facilities to which they are assigned for clinical rotations may require that they submit to a criminal background check before beginning their clinical experiences. Manchester Community College cannot be responsible for finding an alternate clinical placement for a student who fails to pass the background check. Students are advised to meet with an MCC Counselor to discuss degree completion requirements. After graduating from the program, students will be eligible to take the entry level examination offered by the Board of Registered Polysomnographic Technologists (BRPT). A physical examination and an immunization record are required of all students prior to beginning clinical rotations. Students are responsible for hospital parking fees; uniforms; clinical supplies, e.g. stethoscopes; assessment examination and miscellaneous expenses. Note that clinical rotations for the program take place during the overnight hours.

Learning Outcomes
Upon successful completion of all Polysomnography Certificate Program requirements, graduates will
1. Perform the tasks and skills necessary to fulfill the role of an entry level polysomnographic technician, using equipment basic to the profession.
2. Identify pathology and etiology of sleep disorders and the relationship of oxygenation and ventilation.
3. Interpret and use information (medical records, acquisition and analysis system information) to draw reasonable conclusions and provide safe therapy.
4. Model the skills necessary to work in a multicultural world as a medical professional.
5. Meet the educational requirements for professional certification and registration eligibility.

Required Courses
- BIO* 115: Human Biology 4 Credits
- PSG* 101: Polysomnography I 2 Credits
- PSG* 102: Polysomnography Lab I 1 Credits
- PSG* 150: Polysomnography Clinical I 2 Credits
- BOT* 101: Basic Keyboarding 1 Credits
- BOT* 180: Medical Terminology 3 Credits

Subtotal: 13
- RSP* 121: Cardiopulmonary Anatomy & Physiology 3 Credits
- PSG* 201: Polysomnography II 2 Credits
- PSG* 202: Polysomnography Lab II 1 Credits
- PSG* 250: Polysomnography Clinical II 2 Credits
- COM* 173: Public Speaking 3 Credits

Subtotal: 11

Total Credits Required: 24
Public Relations Certificate

Program Design
The certificate program in Public Relations, bridging the disciplines of communications and business, is designed to appeal to several populations: new students considering a degree program in communications, employees in other areas of communications seeking retraining, and students with associate or bachelor's degrees seeking rapid certification in the skills necessary for entry-level positions in public relations.

The program is designed for maximum flexibility. Students who are already proficient in specific areas of communication or technology will be able to fill in the voids in their training by customizing their courses to their individual needs. Similarly, students seeking a broad range of training in all areas relevant to public relations—including marketing, written and oral communications, videography, desktop publishing and graphics—will achieve a generalist’s knowledge.

Transfer Opportunities
Most courses in the certificate program would be transferable to an associate or baccalaureate degree program and all are transferable to the Communication degree program.

Learning Outcomes
Upon successful completion of all Public Relations certificate program requirements, graduates will
1. Design, implement and evaluate a marketing/PR campaign.
2. Write for internal and external publications with an understanding of the needs of the target audiences.
3. Apply basic graphic design principles to newsletters, brochures, reports and related PR projects.
4. Establish media contacts.
5. Serve as an effective spokesperson for an organization or business.
6. Apply ethical principles to decision making and crisis management.
7. Understand the role of the public relations practitioner within the context of mass communication.
8. Understand the effects of print and broadcast media on the practice of public relations.

Required Courses

Business elective — Choose one course
- BMK* 201: Principles of Marketing 3 Credits or
- BMG* 202: Principles of Management 3 Credits or
  BMG* 210: Organizational Behavior 3 Credits

- COM* 166: Video/Filmmaking 3 Credits
- COM* 201: Introduction to Public Relations 3 Credits
- COM* 173: Public Speaking 3 Credits
- COM* 295: Internship I 3 Credits
- COM* 222: Reporting and Writing News Stories. 3 Credits
- COM* 213: Electronic Publishing 3 Credits
- GRA* 151: Graphic Design I 3 Credits
- COM* 108: Contemporary Issues in Media 3 Credits
  English composition elective — Choose one course
- ENG* 101: Composition 3 Credits or
- ENG* 200: Advanced Composition 3 Credits or
- ENG* 202: Technical Writing 3 Credits

Total Credits Required: 30

Note:
Because many courses in this program are offered on an occasional basis, students should meet with an academic advisor or faculty advisor to plan their program of study.
Social Service Certificate

Program Design

The Social Service certificate program is designed for students seeking short-term academic and in-service professional development, and for those with extensive social service experience or an academic degree.

Learning Outcomes

1. Become familiar with the past, present and future of human services.
2. Become prepared to facilitate groups.
3. Be able to communicate orally and in writing in a manner appropriate to the profession of human services.
4. Be prepared to service recipient populations in the profession.

Required Courses

- HSE* 101: Introduction to Human Services 3 Credits
- HSE* 251: Work with Individuals and Families 3 Credits
- HSE* 210: Group & Interpersonal Relations 3 Credits
- HSE* 241: Human Services Agencies and Organizations 3 Credits
- Choose any three courses 9 Credits‡‡
- Choose any two ANT*, ECN*, GEO*, HIS*, POL*, PSY*, SOC* or SSC* courses 6 Credits‡‡

- HSE* 281: Human Services Field Work I 3 Credits ‡ or
- SSC* 294: Cooperative Education/Work Experience 3 Credits

Total Credits Required: 30

Note:

‡ Students are to meet with the program coordinator before selecting a field placement site.
‡‡ Students are encouraged to meet with the program coordinator before choosing electives.
Speech-Language Pathology Assistant Certificate

Program Design
The Speech-Language Pathology Assistant (SLPA) certificate program is designed to prepare graduates for careers working in elementary and secondary schools with children who have communication disorders. SLPAs work under the direct supervision of a licensed, certified Speech-Language Pathologist. The SLPA Certificate provides students with a specialized career path as a paraprofessional.

The array of courses offered in this certificate program will help to ensure learner success in the program and will meet local and state workforce demands in a field where there is a great need for qualified staff at the assistant level.

This program is designed for individuals who currently hold an associate or baccalaureate degree from an accredited institution and who wish to become Speech-Language Pathology Assistants.

The SLPA certificate program is guided by the program philosophy and mission statement of the Disability Specialist Program. Students will receive specific skill instruction to prepare them to become effective SLPAs coupled with a positive value base that will prepare them to assist individuals with disabilities toward the goals of community inclusion and participation and the attainment of their potential.

A student applying for graduation from the Speech-Language Pathology certificate program must provide proof that s/he has received an educational associate or baccalaureate degree from an accredited institution.

Curriculum
The SLPA certificate program is a career program. SLPA certificate program students will complete specialty courses including a supervised internship. Students may select a full- or part-time plan of study.

Learning Outcomes
Upon successful completion of all Speech-Language Pathology Assistant certificate program requirements, graduates will
1. Describe the process of communication and the characteristics of effective communication.
2. Identify the differences between communication disorders and communication differences.
3. Describe the stages of language and literacy development and distinguish among language delays, language disorders and culturally-based language differences.
4. Explain and differentiate among the characteristics, etiologies, and impact of phonology, voice, fluency and language disorders.
5. Explain the effect of hearing loss on the development of communication skills.
6. Describe the role of the Speech-Language Pathology Assistant in supporting therapy plans for students in educational settings.

Required Courses
- SLP* 111: Communication Development 3 Credits
- PSY* 163: Children with Disabilities 3 Credits
- SLP* 112: Speech and Language Services in the Educational Setting 3 Credits
- SLP* 120: Communication Disorders and Intervention I 3 Credits
- SLP* 121: Communication Disorders and Intervention II 3 Credits
- PSY* 183: Learning Process and Disabilities 3 Credits
- ECE* 231: Early Language and Literacy Development 3 Credits
- PSY* 193: Issues/Trends in Disabilities 3 Credits
- SSC* 294: Cooperative Education/Work Experience 3 Credits
- PSY* 164: Assistive Technology for Students with Disabilities (K-12) 1 Credits
- PSY* 174: Assistive Technology for Adults in the Workplace, Home and Community. 1 Credits
- HSE* 294: Disability Specialist Seminar 1 Credits

Total Credits Required: 30
Supply Chain Management Certificate

Program Design

The Supply Chain Management certificate provides a detailed understanding of lean supply chain practices in the industrial workplace for those planning on entering the workforce or for those looking to re-tool themselves in lean management principles. These principles seek to continuously improve all processes and reduce all unnecessary steps in any industrial or business operation making that operation as lean or efficient as possible by applying them to the management of a business’ supply chain. The curriculum was developed by leading experts in the field and combines both principles and theory with implementation in the workplace.

Learning Outcomes

Upon successful completion of all Supply Chain Management certificate program requirements, graduates will
1. Apply appropriate mathematical and scientific principles to engineering and technology applications.
2. Demonstrate proficiency in technical fundamentals to analyze and resolve technology problems.
3. Apply knowledge and skills to develop, interpret and select appropriate technological and business processes using lean principles.

Required Courses

- MFG* 172: Introduction to Lean Supply Chain Management 3 Credits
- MFG* 272: Implementation of Lean Supply Chain Management 3 Credits

Total Credits Required: 6
Sustainable Energy Certificate

Program Design
The Sustainable Energy certificate is designed to provide students the opportunity to learn about the field of sustainable energy and engineering. Students will be exposed to topics in environmental science, sustainable technologies, the engineering fundamentals required to understand and utilize these technologies, and related business and finance topics pertaining to the implementation of sustainable engineering and the establishment of small businesses. Students will have the opportunity to gain hands-on experience in many of the classes. Specifically, this certificate will prepare students for employment and/or establishment of a small business in the fields of sustainable energy and energy auditing. The certificate reviews major energy sources including wind, solar, hydroelectric, bio-fuels and fossil fuels. Course work also covers electrical, heating and cooling systems. This provides students with the skills necessary to determine building energy performance and recommend energy efficiency strategies.

Curriculum
This certificate can be completed in two or more semesters by enrolling either full- or part-time.

Learning Outcomes
Upon successful completion of all Sustainable Energy certificate program requirements, graduates will

1. Understand established and emerging issues and technologies in the field of sustainable energy.
2. Demonstrate knowledge of the use of engineering problem solving and teamwork to develop and implement sustainable energy methodologies in residential and commercial facilities.
3. Analyze the financial impact of the use of sustainable energy methodologies in residential and commercial facilities.
4. Demonstrate proficiency in technical and business operations to analyze and evaluate those operations, and develop methods to improve energy efficiency.

Required Courses

- EVS* 130: Sustainable Energy and the Environment 3 Credits
- EVS* 131: Sustainable Energy for Your Community 3 Credits
- MAT* 172: College Algebra 3 Credits
- BBG* 108: Business & Consumer Finance 3 Credits or
- BES* 218: Entrepreneurship 3 Credits
- EGR* 111: Introduction to Engineering 3 Credits
- EGR* 242: Sustainable Building Systems 4 Credits
- EGR* 240: Current Topics in Sustainable Engineering 1 Credits

Total Credits: 20
Technology Management Certificate

Program Design
The Technology Management certificate is designed for students who wish to prepare for a future career managing a technology operation, in either an engineering, manufacturing or information technology environment. Course work provides students with the fundamental knowledge of how management decisions are made and carried out. This certificate would provide an excellent foundational knowledge for those considering a graduate degree in business administration in the future.
Two electives course is provided such that students can customize a particular specialization area.

Curriculum
This certificate program can be completed in two or more semesters by enrolling either full or part-time.

Learning Outcomes
Upon successful completion of all Technology Management certificate program requirements, graduates will
1. Apply appropriate mathematical and scientific principles to engineering and technology applications.
2. Demonstrate proficiency in technical fundamentals to analyze and resolve technology problems.
3. Apply knowledge and skills to develop, interpret and select appropriate technological and business processes using lean principles.

Required Courses
- ACC* 115: Financial Accounting 4 Credits
- BMG* 202: Principles of Management 3 Credits
- CST* 205: Project Management 4 Credits
- Elective business/technical 3 Credits‡
- Elective business/technical 3 Credits‡
Total Credits: 17

Note:
‡ Business/Technical Elective (choose two)
- BMG* 210: Organizational Behavior 3 Credits
- CSC* 230: Database Concepts with Web Application 3 Credits
- CST* 201: Introduction to MIS 3 Credits
- MFG* 111: Manufacturing Materials and Process I 3 Credits
- MFG* 171: Introduction to Lean Manufacturing 3 Credits
- MFG* 172: Introduction to Lean Supply Chain Management 3 Credits
- MFG* 230: Statistical Process Control 3 Credits
Therapeutic Recreation Certificate

Program Design
The Therapeutic Recreation certificate program is designed for persons who seek academic and in-service professional development in the field of therapeutic recreation. This program enables the student to meet standards established in the Public Health Code of the State of Connecticut to work in chronic and convalescent nursing homes and other facilities with nursing supervision.

Therapeutic recreation is a specialized allied health field within the recreation profession. Associated with leisure aspects of medical treatment, therapeutic recreation attempts to physically and socially rehabilitate patients who have chronic physical, psychological and social disabilities. It involves recreation services that give the patient an opportunity to participate in recreational, leisure and group activities specifically designed to aid in the recovery or adjustment to illness, disability or a specific social problem.

Curriculum Students may enroll in this certificate program full- or part-time and attend classes days or evenings.

Learning Outcomes
Upon successful completion of all Therapeutic Recreation certificate program requirements, graduates will

1. Meet the state health code requirements to hold the position of a therapeutic recreation director in the State of Connecticut.
2. Demonstrate the ability to comprehend and apply the necessary skills required of a therapeutic recreation director.
3. Demonstrate the ability to comprehend the needs of individuals with special needs and the positive outcomes of therapeutic recreation intervention.
4. Demonstrate the ability to successfully assess, plan, implement and evaluate therapeutic recreation programs for individuals with special needs both in a clinical and community setting.
5. Have developed leadership, interpersonal and communication skills necessary to work in a health care or community-based setting.

Required Courses
- Elective Gerontology 3 Credits
- Elective Gen Ed - Mode 1 or
- HLT* 151: Health and Wellness Promotion 3 Credits
- ENG* 101: Composition 3 Credits
- PSY* 111: General Psychology I 3 Credits
- SSC* 294: Cooperative Education/Work Experience 3 Credits
- RLS* 101: Introduction to Recreation and Leisure Services 3 Credits
- RLS* 121: Introduction to Therapeutic Recreation Services 3 Credits
- RLS* 122: Processes and Techniques in Therapeutic Recreation 3 Credits
- RLS* 221: Therapeutic Recreation Programming 3 Credits
- RLS* 223: Leisure and Aging 3 Credits

Total Credits Required: 30
Web Technology Certificate

Program Design
The Web Technology certificate program prepares students with the programming techniques for web application development and the critical skills needed to conceive, build and maintain sophisticated web sites. Students will be provided with a comprehensive look at the administration of web content and its complexities. This certificate program also serves individuals in the current high-tech industry the opportunity to upgrade their skills in the web area for possible advancement or new career opportunities.

Curriculum
Students may enroll in this program full or part-time. Students should consult with an Information Management & Office Technology faculty advisor to plan their program and discuss require course prerequisites.

Learning Outcomes
Upon successful completion of all Web Technology certificate program requirements, graduates will

1. Use the core technologies of current markup languages such as HTML5 and CSS3 for web development and design.
2. Write code effectively and build easily navigable sites.
3. Demonstrate competency in programming languages commonly used in developing and servicing Internet web sites, both client-side and server-side.
4. Demonstrate an understanding of proper database design and its application over a distributed network.
5. Demonstrate proficiency in developing complex web sites incorporating database driven technologies.
6. Understand the role of project management, and how to set and manage client expectations, support client interaction activities, and track progress throughout the project lifecycle.

Required Courses
- CST* 150: Web Design & Development I 3 Credits
- CST* 250: Web Design and Development II 3 Credits
- CSC* 230: Database Concepts with Web Application 3 Credits ‡
- CST* 258: Internet Programming 4 Credits ‡
- CST* 205: Project Management 4 Credits

Total Credits Required: 17

Note:
‡ A prerequisite of CSC*124, CSC*125, EGR*230 or other programming experience is required for these courses.
Course Descriptions

Accounting

ACC* 098: Introduction to Accounting
0 Credits
(Formerly ACCT 098)
This course is designed to introduce students to accounting theory. Emphasis in the course includes the accounting cycle, bank checking accounts and payroll.
Prerequisites: None
Offered: Occasionally

ACC* 115: Financial Accounting
4 Credits
(Formerly ACCT 101)
Theory and practice of accounting applicable to the accumulation, external reporting, and external uses of financial accounting information.
Prerequisites: Eligible for ENG* 101 and MAT* 095 or higher
Offered: Fall, Spring, Summer

ACC* 118: Managerial Accounting
4 Credits
(Formerly ACCT 102)
Basic concepts and practice of accounting’s role in providing information to managers to assist in their planning, control and decision-making activities. Topics include cost accounting, cost behavior relationships, analyses for managerial decisions and the budget process.
Prerequisites: Eligible for ENG* 101 and MAT* 095 or higher, and C- or better in ACC* 115
Offered: Fall, Spring, Summer

ACC* 121: Introduction to Accounting Software
1 Credits
(Formerly ACCT 110)
Includes software for a complete accounting cycle and is available to students via the BOT lab using automated accounting software such as QuickBooks.
Prerequisites: C- or better in BOT* 164 or ACC* 115
Offered: Fall, Spring

ACC* 125: Accounting Computer Applications I
3 Credits
(Formerly ACCT 105)
This course teaches students to build a company’s accounting system in QuickBooks. Students will learn to download QuickBooks data into an Excel spreadsheet and build linked statements, footnotes and graphs. Students will also learn PowerPoint and TurboTax.
Prerequisites: Eligible for ENG* 101 and MAT* 095 or higher, and completion of ACC* 115
Offered: Fall, Spring

ACC* 231: Cost Accounting I
3 Credits
(Formerly ACCT 213)
This course covers principles of cost accounting for manufacturing and business.
Prerequisites: Eligible for ENG* 101 and MAT* 095 or higher, and C or better in ACC* 118
Offered: Spring

ACC* 241: Federal Taxes I
3 Credits
(Formerly ACCT 223)
Theories and laws of individual income tax returns will be taught.
Prerequisites: Eligible for ENG* 101 and MAT* 095 or higher, and C or better in ACC* 115
Offered: Fall

ACC* 242: Federal Taxes II
3 Credits
(Formerly ACCT 224)
Corporation, partnership, estate and trust taxation, including tax administration and practice, will be taught.
Prerequisites: Eligible for ENG* 101 and MAT* 095 or higher, and C or better in ACC* 241
Offered: Occasionally

ACC* 243: Tax Planning I
3 Credits
(Formerly ACCT 226)
This course focuses on the provisions of current tax laws and the business and investment decisions they affect.
Prerequisites: ACC* 241 or BFP* 210 or permission of instructor
Offered: Occasionally

ACC* 244: Tax Planning II
3 Credits
(Formerly ACCT 227)
This course focuses on tax problems and sets out the multiple alternatives that must be analyzed.
Prerequisites: Eligible for ENG* 101 and MAT* 095 or higher, and ACC* 243
Offered: Occasionally

ACC* 251: Fund Accounting
3 Credits
This course is designed to provide the accounting student a foundation for working in non-profit organizations. This foundation includes federal, state and local governmental fund accounting principles. In addition, this course will include accounting for schools, hospitals and fund-raising organizations. Students may take this course as a substitute for cost accounting or may wish to take this course to add to their accounting skills and to broaden their job opportunities in these accounting fields.
Prerequisites: Eligible for ENG* 101 and MAT* 095 or higher, and C- or better in ACC* 118 and ACC* 125
Offered: Occasionally

ACC* 275: Principles of Intermediate Accounting I
4 Credits
(Formerly ACCT 201)
This course covers fundamental processes of accounting; working capital; investments; plant and equipment acquisition, depreciation and disposal; and intangibles. Students may work on computers on some exercises, exams and projects during classes.
Prerequisites: Eligible for ENG* 101 and MAT* 095 or higher, and C- or better in ACC* 118 and ACC* 125
Offered: Fall
ACC* 276: Principles of Intermediate Accounting II
4 Credits
(Formerly ACCT 202)
This course covers plant and equipment depreciation, reevaluations, intangibles, long-term liabilities, stockholder’s equity, analytical processes, statement of cash flows, pensions, leases, and publicly held companies. Students may work on computers on some exercises, exams and projects during classes.
Prerequisites: Eligible for ENG* 101 and MAT* 095 or higher, and C or better in ACC* 275
Offered: Spring

ACC* 290: Cooperative Education/Work Experience
3 Credits
(Formerly ACCT 270)
This course provides students the opportunity to apply classroom theory in an actual work setting. Students may be placed in a variety of work settings as related to their program of study including corporations, small businesses and state offices.
Prerequisites: 15 completed credit hours in the Accounting program including ACC* 115, ACC* 118, and ACC* 275
Offered: Fall, Spring

Anthropology

ANT* 101: Introduction to Anthropology
3 Credits
(Formerly ANTH 101)
This course is designed to provide a basic overview and understanding of the evolution of the human species and human culture through fossils, genetics and ethnographic insight. It seeks to explain the similarities and differences shared by all humans and that humans share with non-human primates. It explores the question at the core of all anthropological research: It does all this in search of answers to the question: What does it mean to be human?
Prerequisites: Eligibility for ENG* 101
Offered: Fall, Spring
Fulfills General Education - Mode 6
Fulfills General Education - Knowledge of Human Expressions & Behavior

ANT* 105: Introduction to Cultural Anthropology.
3 Credits
(Formerly ANTH 150)
This course is designed to provide students with an anthropological lens through which they may simultaneously view humanity’s kinship with one another and its uniqueness among cultures. The aim is to understand people whose ways of life are different from our own but with whom we share common needs, planet Earth and a common destiny.
Prerequisites: Eligibility for ENG* 101
Offered: Fall, Spring
Fulfills General Education - Mode 6

ANT* 118: Health, Healing and Culture.
3 Credits
(Formerly ANTH 220)
This is a cross-cultural survey course that investigates the concepts of healing, health and sickness from a sampling of countries throughout the world. The aim is to understand the importance of culture in determining the etiology and treatment of diseases and mental disorders. The objective will be to understand and integrate the various belief systems with the practices that identify the disease and effect the cures.
Prerequisites: Eligibility for ENG* 101  
Offered: Fall, Spring

**ANT* 121: Introduction to Archaeology**  
3 Credits  
This is an anthropology course devoted to the study of archaeology and how archaeologists help us to understand the human past. Archaeology is the study of past cultures and societies through their material remains. We will consider and explore the theory, methods, and techniques that archaeologists employ. The course will include a brief discussion and chronology of human and cultural evolution. We will then turn our attention to the purpose and process of archaeological field work and analysis. We will consider the ways that archaeologists reconstruct human behavior and we will explain how the discipline is relevant in the modern world. This class will include a ‘field-work’ component in which students will excavate a mock archaeological site. This class will also include several class trips to nearby museums.  
Prerequisites: Eligibility for ENG* 101  
Offered: Occasionally

**ANT* 140: Indians of the Americas**  
3 Credits  
This course is meant to introduce students to the wide variety and depth of indigenous groupings throughout the Americas. Emphasis will be placed upon traditions that are being preserved by those who have survived to the 21st century. Life as lived prior to European domination will be studied. Survival stories and linkages from today to the past will be shared.  
Prerequisites: Eligibility for ENG* 101  
Offered: Occasionally

**ANT* 201: Physical Anthropology**  
3 Credits  
This is an anthropology course based on evolutionary biology that covers topics on human evolution and modern human variation by focusing on humanity’s biological roots and modern appearance. It will reconstruct the past utilizing data from the primate fossil record, as well as comparative evidence from modern monkeys and apes.  
Prerequisites: Eligibility for ENG* 101  
Offered: Occasionally  
Fulfills General Education - Mode 6

**Art**

**ART* 101: Art History I**  
3 Credits  
(Formerly FA 101)  
The history and appreciation of fine arts (painting, sculpture, architecture, etc.) from prehistoric through medieval eras. Outside reading and visits to galleries and museums are required.  
Prerequisites: Eligibility for ENG* 101  
Offered: Fall  
Fulfills General Education - Mode 1  
Fulfills General Education - Knowledge of Human Thought & Expression

**ART* 102: Art History II: Renaissance to the Present**  
3 Credits  
(Formerly FA 102)  
The history and appreciation of fine arts (painting, sculpture, architecture, etc.) from the Renaissance through the 20th century. Outside reading and visits to galleries and museums are required.
**ART* 103: Art History III**
3 Credits

(Formerly FA 103)
Visual art movements of the past 100 years from Impressionism and Cubism to today’s art. Outside reading and visits to galleries and museums are required.

**Prerequisites:** Eligibility for ENG* 101

**Offered:** Fall, Spring

Fulfills General Education - Mode 1

**ART* 104: Contemporary Art History**
3 Credits

An introduction to developments in 21st-century art, with attention to the theoretical, social and historical forces that shape artistic practice. Newer artistic practices like installation, new media, and performance are studied along with traditional media. Includes field trips to area art museums.

**Prerequisites:** Eligibility for ENG* 101

**Offered:** Fall, Spring

Fulfills General Education - Mode 1

**ART* 107: Introduction to Studio Art**
3 Credits

(Formerly FA 115)
A course covering the fundamentals of visual art through hands-on experience. The course includes basic design and composition, color theory, drawing and a thorough exploration of the creative process through the use of a wide variety of media and techniques including drawing, water media, collage and fiber.

**Prerequisites:** None

**Offered:** Occasionally

Fulfills General Education - Mode 1

**ART* 111: Drawing I**
3 Credits

(Formerly FA 121)
This course covers the basic elements, media and processes of drawing including composition and perspective. Extensive drawing from still-life, landscape and the live model will emphasize development of students’ manual, perceptual and conceptual skills. Studio: 6 hours per week.

**Prerequisites:** Eligibility for ENG* 101 or permission of instructor

**Offered:** Fall, Spring

Fulfills General Education - Mode 1

**ART* 112: Drawing II**
3 Credits

(Formerly FA 122)
This course covers the basic elements, media and processes of drawing including composition and perspective. Extensive drawing from still-life, landscape and the live model will emphasize development of students’ manual, perceptual and conceptual skills. Studio: 6 hours per week.

**Prerequisites:** C or better in ART* 111 and eligibility for ENG* 101

**Offered:** Fall, Spring
ART* 113: Figure drawing I
3 Credits
(Formerly FA 127)
This in-depth course is based in both anatomical and expressive approaches to human figure drawing. A variety of media will be explored, including color and wet media, along with instruction in composition, proportion and foreshortening principles. Students will work extensively from the live model. Studio: 6 hours per week.
Prerequisites: C or better in ART* 111 and eligibility for ENG* 101
Offered: Fall, Spring
Fulfills General Education - Mode 1

ART* 114: Figure drawing II
3 Credits
(Formerly FA 128)
This in-depth course is based in both anatomical and expressive approaches to human figure drawing. A variety of media will be explored, including color and wet media, along with instruction in composition, proportion and foreshortening principles. Students will work extensively from the live model. Studio: 6 hours per week.
Prerequisites: C or better in ART* 111 and eligibility for ENG* 101
Offered: Fall, Spring

ART* 121: Two-Dimensional Design
3 Credits
(Formerly FA 125)
The theory and practice of design principles: compositional problems, color and the interrelationships of space, planes and volumes are examined in two dimensional projects using a variety of media. Studio: 6 hours per week.
Prerequisites: Eligibility for ENG* 101 or permission of instructor
Offered: Fall, Spring
Fulfills General Education - Mode 1

ART* 122: Three-Dimensional Design
3 Credits
(Formerly FA 126)
Investigation of spatial design as a decision-making and problem-solving process bounded by criteria such as human sensory systems, basic structural systems and materials. Class activities will include studio assignments, demonstrations, lectures, slide presentations, museum visits and critiques. Studio problems will be worked on during and outside of class time. Studio: 6 hours per week.
Prerequisites: Eligibility for ENG* 101 or permission of instructor
Offered: Fall, Spring
Fulfills General Education - Mode 1

ART* 131: Sculpture I
3 Credits
(Formerly FA 151)
A course in the principles, techniques, and materials of sculpture (metal fabrication/welding, casting, plaster, wood, etc.). Students will concentrate on controlling sculptural media and examining the fundamentals of three-dimensional design. Studio: 6 hours per week.
Prerequisites: Eligibility for ENG* 101 or permission of instructor
Offered: Fall, Spring
Fulfills General Education - Mode 1
ART* 132: Sculpture II
3 Credits
(Formerly FA 152)
A course in the principles, techniques, and materials of sculpture (metal fabrication/welding, casting, plaster, wood, etc.). Students will concentrate on controlling sculptural media and examining the fundamentals of three-dimensional design. Studio: 6 hours per week.
Prerequisites: Eligibility for ENG* 101 or permission of instructor
Offered: Fall, Spring

ART* 141: Photography I
3 Credits
An introduction to black and white film photography, including camera operation, creative controls, composition, film processing, printing and print finishing techniques. Emphasis is on photography as a fine art and as a means of communication. Through demonstrations, assignments, critiques, supervised and independent lab work, a final portfolio and looking at a broad range of photographic imagery, students will develop technical skills and explore the creative/expressive side of photography. Students must purchase film, photographic paper and other supplies. Projects and final portfolio require extensive hands-on darkroom work in and outside of class hours. Studio: 6 hours per week.
Prerequisites: Eligibility for ENG* 101 or permission of instructor
Offered: Fall, Spring
Fulfills General Education - Mode 1

ART* 142: Photography II
3 Credits
Through demonstrations, assignments, critiques, supervised and independent lab work and looking at a broad range of photographic imagery, students will refine basic and develop new technical skills and further explore the creative/expressive side of black and white film photography. Students will review the fundamentals of exposure, development and print-making, refine camera-handling and printing techniques, use a medium format camera and hand-held light meter, experiment with flash, studio lighting and "toy" cameras. Students will be encouraged to develop a personal, expressive style in addition to mastering a range of practical photographic techniques while they assemble a cohesive, thematic, exhibition-quality portfolio. Students must purchase film, photographic paper and other supplies. Studio: 6 hours per week.
Prerequisites: ART* 141 with a C or better, and eligibility for ENG* 101 or permission of instructor.
Offered: Fall, Spring

ART* 151: Painting I
3 Credits
(Formerly FA 131)
A course in the technical and aesthetic fundamentals of painting, covering construction of a canvas, selection and use of materials, basic color theory, and realistic and expressive paint handling. Students will work in both traditional and experimental painting styles. Studio: 6 hours per week.
Prerequisites: C or better in ART* 111 and eligibility for ENG* 101 or permission of instructor
Offered: Fall, Spring
Fulfills General Education - Mode 1

ART* 152: Painting II
3 Credits
(Formerly FA 132)
A course in the technical and aesthetic fundamentals of painting, covering construction of a canvas, selection and use of materials, basic color theory, and realistic and expressive paint handling. Students will work in both traditional and experimental painting styles. Studio: 6 hours per week.
Prerequisites: C or better in ART* 111 and eligibility for ENG* 101 or permission of instructor  
Offered: Fall, Spring

**ART* 155: Watercolor I**
3 Credits  
(formerly FA 137)
An introduction to the technical and aesthetic principles of painting with water media, primarily water color. This course will cover the selection and use of water media materials in a variety of styles and deal with varied subject matter from the still life to the landscape. Design elements and compositional problems are also included. Studio: 6 hours per week.  
Prerequisites: Eligibility for ENG* 101  
Offered: Fall, Spring  
Fulfills General Education - Mode 1

**ART* 156: Watercolor II**
3 Credits  
(formerly FA 138)
An introduction to the technical and aesthetic principles of painting with water media, primarily water color. This course will cover the selection and use of water media materials in a variety of styles and deal with varied subject matter from the still life to the landscape. Design elements and compositional problems are also included. Studio: 6 hours per week.  
Prerequisites: Eligibility for ENG* 101  
Offered: Fall, Spring

**ART* 161: Ceramics I**
3 Credits  
(formerly FA 165)
Experimentation with, and development of, basic skills in a variety of hand-forming, wheel-throwing, firing and glazing techniques. The class focuses on processes involved in creating both utilitarian and sculptural works. Studio: 6 hours per week.  
Prerequisites: Eligibility for ENG* 101 or permission of instructor.  
Offered: Fall, Spring  
Fulfills General Education - Mode 1

**ART* 162: Ceramics II**
3 Credits  
(formerly FA 166)
Experimentation with, and development of, basic skills in a variety of hand-forming, wheel-throwing, firing and glazing techniques. The class focuses on processes involved in creating both utilitarian and sculptural works. Studio: 6 hours per week.  
Prerequisites: Eligibility for ENG* 101 or permission of instructor.  
Offered: Fall, Spring

**ART* 167: Printmaking I**
3 Credits  
(formerly FA 141)
A course in the materials, design and techniques of printmaking: monoprinting, intaglio, relief, planographic and serigraph. Studio: 6 hours per week.  
Prerequisites: Eligibility for ENG* 101  
Offered: Fall, Spring  
Fulfills General Education - Mode 1
ART* 168: Printmaking II
3 Credits  
(Formally FA 142)
A course in the materials, design and techniques of printmaking: monoprinting, intaglio, relief, planographic and serigraph. Studio: 6 hours per week.  
Prerequisites: Eligibility for ENG* 101  
Offered: Fall, Spring

ART* 171: Fiber Arts I
3 Credits  
(Formally FA 161)
A course in contemporary and traditional means of making art with fibers including weaving, soft sculpture, batik, tapestries, paper making and coiling. Studio: 6 hours per week.  
Prerequisites: None  
Offered: Occasionally

ART* 172: Fiber Arts II
3 Credits  
(Formally FA 162)
A course in contemporary and traditional means of making art with fibers including weaving, soft sculpture, batik, tapestries, paper making and coiling. Studio: 6 hours per week.  
Prerequisites: None  
Offered: Occasionally

ART* 185: Video/Filmmaking
3 Credits  
(Formally FA 176)
A creative workshop in which students will work in groups and make their own movies. Students work with video camcorders and editors. Students will learn scripting, shooting, editing and audio production techniques.  
Prerequisites: None  
Offered: Fall, Spring  
Cross listed as: COM* 166Fulfills General Education - Mode 1

ART* 204: History of Women in the Arts
3 Credits  
(Formally FA 106)
This course will address the cultural biases that have relegated women artists to the ‘back burner’ of mainstream cultural aesthetics. A historical survey of women’s contributions to the visual and performing arts will augment, inquiry into philosophical questions such as: “Is there a ‘Feminist’ Aesthetic?” or “Who determines what is ‘great’ art?” Class: 3 hours per week.  
Prerequisites: None  
Offered: Occasionally  
Fulfills General Education - Mode 1

ART* 205: History of Photography
3 Credits
This course surveys the nearly 200-year history of photography from early experiments and the daguerreotype to the digital revolution and the present day. Students will learn about photography’s major practitioners, applications, movements, and the technological developments that changed the way images were made, distributed and viewed. Photography will be examined in social and cultural context, giving students a broad
understanding of the medium’s impact and significance.

**Prerequisites:** Eligibility for ENG* 101

**Offered:** Spring

**ART* 211: Drawing III**

3 Credits

*(Formerly FA 223)*

This course covers the basic elements, media and processes of drawing including composition and perspective. Extensive drawing from still-life, landscape and the live model will emphasize development of students’ manual, perceptual and conceptual skills. Studio: 6 hours per week.

**Prerequisites:** C or better in ART* 111 and eligibility for ENG* 101

**Offered:** Fall, Spring

**ART* 212: Drawing IV**

3 Credits

*(Formerly FA 224)*

This course covers the basic elements, media and processes of drawing including composition and perspective. Extensive drawing from still-life, landscape and the live model will emphasize development of students’ manual, perceptual and conceptual skills. Studio: 6 hours per week.

**Prerequisites:** C or better in ART* 111 and eligibility for ENG* 101

**Offered:** Fall, Spring

**ART* 213: Figure drawing III**

3 Credits

*(Formerly FA 227)*

This in-depth course is based in both anatomical and expressive approaches to human figure drawing. A variety of media will be explored, including color and wet media, along with instruction in composition, proportion and foreshortening principles. Students will work extensively from the live model. Studio: 6 hours per week.

**Prerequisites:** C or better in ART* 111 and eligibility for ENG* 101

**Offered:** Fall, Spring

**ART* 214: Figure drawing IV**

3 Credits

*(Formerly FA 228)*

This in-depth course is based in both anatomical and expressive approaches to human figure drawing. A variety of media will be explored, including color and wet media, along with instruction in composition, proportion and foreshortening principles. Students will work extensively from the live model. Studio: 6 hours per week.

**Prerequisites:** C or better in ART* 111 and eligibility for ENG* 101

**Offered:** Fall, Spring

**ART* 231: Sculpture III**

3 Credits

*(Formerly FA 253)*

A course in the principles, techniques, and materials of sculpture (metal fabrication/welding, casting, plaster, wood, etc.). Students will concentrate on controlling sculptural media and examining the fundamentals of three-dimensional design. Studio: 6 hours per week.

**Prerequisites:** Eligibility for ENG* 101 or permission of instructor

**Offered:** Fall, Spring
ART* 232: Sculpture IV
3 Credits
(Formerly FA 254)
A course in the principles, techniques, and materials of sculpture (metal fabrication/welding, casting, plaster, wood, etc.). Students will concentrate on controlling sculptural media and examining the fundamentals of three-dimensional design. Studio: 6 hours per week.
Prerequisites: Eligibility for ENG* 101 or permission of instructor
Offered: Fall, Spring

ART* 242: Photography III
3 Credits
Students will work independently and in small groups with film or digital cameras, in the darkroom or computer lab, on projects and portfolios. Through experimenting, practice and critique students will produce a cohesive, themed portfolio appropriate for transfer applications, exhibition or the job search. Students must purchase film, paper and other supplies. Studio: 6 hours per week
Prerequisites: Eligibility for ENG* 101, ART* 142 or ART* 281. Note: for ART* 242, C or better in ART* 142 or ART* 281. Runs concurrently with ART* 142: Photography II (Fa) and ART* 281: Digital Photography II (Sp).
Offered: Fall, Spring

ART* 250: Digital Photography
3 Credits
An introduction to digital photography including hardware and software, camera handling and creative controls, file formats and management, image editing, manipulation and output options using Adobe Photoshop. Through demonstrations and assignments, a survey of imagery and a final portfolio, students will be introduced to the basic vocabulary, concepts, tools and expressive possibilities of digital photography. Students must own a digital camera with manual, aperture priority and/or shutter priority exposure modes. Basic computer and photographic experience preferred. Studio: 6 hours per week.
Prerequisites: Eligibility for ENG* 101 or permission of instructor
Offered: Fall, Spring
Fulfills General Education - Mode 1

ART* 251: Painting III
3 Credits
(Formerly FA 233)
A course in the technical and aesthetic fundamentals of painting, covering construction of a canvas, selection and use of materials, basic color theory, and realistic and expressive paint handling. Students will work in both traditional and experimental painting styles. Studio: 6 hours per week.
Prerequisites: C or better in ART* 111 and eligibility for ENG* 101 or permission of instructor
Offered: Fall, Spring

ART* 252: Painting IV
3 Credits
(Formerly FA 234)
A course in the technical and aesthetic fundamentals of painting, covering construction of a canvas, selection and use of materials, basic color theory, and realistic and expressive paint handling. Students will work in both traditional and experimental painting styles. Studio: 6 hours per week.
Prerequisites: C or better in ART* 111 and eligibility for ENG* 101 or permission of instructor
Offered: Fall, Spring
ART* 255: Watercolor III
3 Credits
(Formerly FA 237)
An introduction to the technical and aesthetic principles of painting with water media, primarily water color. This course will cover the selection and use of water media materials in a variety of styles and deal with varied subject matter from the still life to the landscape. Design elements and compositional problems are also included. Studio: 6 hours per week.
Prerequisites: Eligibility for ENG* 101
Offered: Fall, Spring

ART* 256: Watercolor IV
3 Credits
(Formerly FA 238)
An introduction to the technical and aesthetic principles of painting with water media, primarily water color. This course will cover the selection and use of water media materials in a variety of styles and deal with varied subject matter from the still life to the landscape. Design elements and compositional problems are also included. Studio: 6 hours per week.
Prerequisites: Eligibility for ENG* 101
Offered: Fall, Spring

ART* 261: Ceramics III
3 Credits
(Formerly FA 267)
Experimentation with, and development of, basic skills in a variety of hand-forming, wheel-throwing, firing and glazing techniques. The class focuses on processes involved in creating both utilitarian and sculptural works. Studio: 6 hours per week.
Prerequisites: Eligibility for ENG* 101 or permission of instructor.
Offered: Fall, Spring

ART* 262: Ceramics IV
3 Credits
(Formerly FA 268)
Experimentation with, and development of, basic skills in a variety of hand-forming, wheel-throwing, firing and glazing techniques. The class focuses on processes involved in creating both utilitarian and sculptural works. Studio: 6 hours per week.
Prerequisites: Eligibility for ENG* 101 or permission of instructor.
Offered: Fall, Spring

ART* 267: Printmaking III
3 Credits
(Formerly FA 143)
A course in the materials, design and techniques of printmaking: monoprinting, intaglio, relief, planographic and serigraph. Studio: 6 hours per week.
Prerequisites: Eligibility for ENG* 101
Offered: Fall, Spring

ART* 268: Printmaking IV
3 Credits
(Formerly FA 144)
A course in the materials, design and techniques of printmaking: monoprinting, intaglio, relief, planographic
and serigraph. Studio: 6 hours per week.

**Prerequisites:** Eligibility for ENG* 101

**Offered:** Fall, Spring

**ART* 281: Digital Photography II**

3 Credits
Through demonstrations, assignments, critiques, supervised and independent lab work and looking at and talking about a broad range of photographic imagery, students will develop new skills and further explore the creative/expressive side of photography. Students will review the fundamentals of exposure and creative camera controls, learn a non-destructive workflow, advanced masking techniques, and how to process RAW files. Other projects will explore studio lighting, high dynamic range (HDR) imaging and fine art inkjet output. Students will be encouraged to develop a personal, expressive style in addition to mastering a range of practical photographic techniques while they assemble a cohesive, thematic, exhibition-quality, hard-copy portfolio. Students must own their own digital single lens reflex or prosumer digital camera with RAW capability and purchase their own storage media, inkjet paper, mat board and other supplies.

**Prerequisites:** ART* 250 with a C or better, eligibility for ENG* 101 or permission from Instructor

**Offered:** Fall

**ART* 282: New Media**

3 Credits
An introduction to artistic thinking in terms of the moving image. Students work towards discovering a personal way of working in video as a fine art medium. We will take into account current and historical approaches to video art and the place video occupies in the general field of Art. Half of the classes consist of viewing and critiquing previously assigned homework projects, the other half of lab sessions in the editing room. Students are expected to shoot and do most of the editing in their own time. Assignments will begin with the exploration of the self and the immediate environment and gradually expand in scope and complexity. The final project will be a personal artistic statement by the student and will be worked out on an individual basis. Students will have access to camcorders and editing facilities. NOTE: This is a fine arts class. It is not designed for those primarily interested in the commercial use of video (advertisements, music videos, etc.). Studio: 6 hours per week.

**Prerequisites:** Eligibility for ENG* 101.

**Offered:** Fall, Spring

**ART* 283: Photojournalism**

3 Credits
An introduction to photojournalism and digital photography including hardware and software, camera handling and creative controls, file management and image editing using Adobe Photoshop. History, ethics, composition, lighting and visual communication will be investigated. Through demonstrations and assignments (including assignments for the student newspaper), a survey of imagery and a final project, students will be introduced to the basic vocabulary, concepts, tools and techniques of photography and photojournalism. Students must own a digital camera with manual and/or aperture priority and shutter priority exposure modes.

**Prerequisites:** Basic computer experience preferred

**Offered:** Fall, Spring

**Fulfills General Education - Mode 1**

**ART* 287: Visual Fine Arts Professional Practices**

3 Credits
This course is a practical guide for students who want to transfer to a baccalaureate institution or pursue a career in the Visual Fine Arts. Students will work to develop a portfolio suitable for transfer or career, write an artist’s statement, write a resume, make digital slides, and discuss the transfer application process as well as grant and exhibition possibilities. Class discussions, group critiques, guest lectures and presentations, and field trips will
be part of the curriculum. This course is strongly recommended for all Visual Fine Arts majors. Enrollment is limited to VFA majors who have completed at least 30 credits. 

**Prerequisites:** Eligibility for ENG* 101  
**Offered:** Fall, Spring

**ART* 292: Cooperative Education**  
3 Credits  
*(Formerly FA 270)*  
This course provides students the opportunity to apply classroom theory in an actual work setting. Students may be placed in a variety of work settings as related to their programs of study including corporations, publishing/graphic design firms and newspapers.  
**Prerequisites:** 15 completed credit hours in Graphic Design  
**Offered:** Fall, Spring

**FA 163: Fiber Arts I**  
3 Credits  
*(Formerly FA 163)*  
A course in contemporary and traditional means of making art with fibers including weaving, soft sculpture, batik, tapestries, paper making and coiling. Studio: 6 hours per week.  
**Prerequisites:** None  
**Offered:** Occasionally

**FA 164: Fiber Arts II**  
3 Credits  
*(Formerly FA 164)*  
A course in contemporary and traditional means of making art with fibers including weaving, soft sculpture, batik, tapestries, paper making and coiling. Studio: 6 hours per week.  
**Prerequisites:** None  
**Offered:** Occasionally

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**Astronomy**

**AST* 101: Principles of Astronomy**  
3 Credits  
*(Formerly ASTR 110)*  
This is an introductory descriptive astronomy course with emphasis on the earth and its motions, the moon and planets, the sun, and stars and galaxies. Observation sessions will be required. Students who have taken AST* 111 will not receive credit for this course.  
**Prerequisites:** "C" or better in MAT* 095, or eligibility for MAT* 138  
**Offered:** Fall, Spring, Summer  
**Fulfills General Education - Mode 5**

**AST* 111: Introduction to Astronomy**  
4 Credits  
An introductory course in classical and modern Astronomy designed to raise the level of student awareness of celestial objects including their history, properties, interrelationships, and impact upon our understanding of the universe. The laboratory portion of the course consists of activities in elementary astronomy designed to reinforce and extend knowledge of selected topics covered in the lecture portion of the course. Student who have taken AST* 101 will not receive credit for this course. Class: 3 hours per week. Laboratory: 2 hours per week.  
**Prerequisites:** "C" or higher in MAT* 095, or eligibility for MAT* 138  
**Offered:** Fall, Spring  
**Fulfills General Education - Mode 5**
Biology

BIO* 105: Introduction to Biology
4 Credits
(Formerly BIO 100)
This course is a study of the fundamental principles of biology as they relate to current issues. It may be used to fulfill the general education natural and physical science requirement, and is recommended for students who do not need a full year of laboratory biology. No dissection is required. Class: 3 hours per week. Laboratory: 3 hours per week.
Prerequisites: Eligibility for ENG* 101
Offered: Fall, Spring
Fulfills General Education - Mode 5
Fulfills General Education - Knowledge of Physical & Natural World

BIO* 109: Principles of Biotechnology
3 Credits
During the semester students will be introduced to key elements in the exciting and rapidly advancing field of biotechnology. The course will provide students with a brief historical context, the basic scientific knowledge needed to understand biotechnology, a survey of current and future applications of the technology and a candid examination of the pros and cons, promises and dangers of the technology.
Prerequisites: Eligibility for ENG* 101
Offered: Occasionally

BIO* 111: Introduction to Nutrition
3 Credits
(Formerly BIO 114)
An introduction to the study of human nutrition with emphasis on the scientific bases of facts and controversies surrounding issues of foods and diets will be taught. Not open to students who have completed BIO* 112.
Prerequisites: Eligibility for ENG* 101.
Offered: Fall, Spring, Summer

BIO* 115: Human Biology
4 Credits
(Formerly BIO 112)
This course is an introduction to the structure and function of the human body. Various organ systems will be discussed with an emphasis on how they maintain homeostasis. The lab will include some dissection. Students who have passed a higher level human anatomy and physiology course will not receive credit for this course. Class: 3 hours per week. Laboratory: 3 hours per week.
Prerequisites: Eligibility for ENG* 101
Offered: Fall, Spring, Summer
Fulfills General Education - Mode 5
Fulfills General Education - Knowledge of Physical & Natural World

BIO* 120: Immunity and Human Disease
3 Credits
This course will examine diseases caused by the homeostatic imbalance of the Immune System and its effects. What happens when the system in our body designed to protect us, turns on us? What happens when this defense system is over protective or not protective enough? Diseases of the Human Body will explore the normal functions of the Immune System and some of the problems that can result when it’s not operating effectively. Diseases such as Lupus, Type II Diabetes, Rheumatoid Arthritis and HIV/AIDS will be explored.
Prerequisites: "C" or better in ENG* 101 or concurrent
Offered: Fall, Spring
Fulfills General Education - Mode 5

BIO* 121: General Biology I
4 Credits
(Formerly BIO 101)
This course is a study of the fundamental principles of biology concerning the structure and function of cells, heredity, and biotechnology. Recommended for LAS students, especially those who will be pursuing science-related careers. No dissection is required. Students who have not had a high school biology course, or who had one more than 5 years ago, should strongly consider enrolling in BIO* 105. Class: 3 hours per week. Laboratory: 3 hours per week.
Prerequisites: ENG* 101 with a grade of "C" or better (or may be taken concurrently) and MAT* 095 with a grade of "C" or better.
Offered: Fall, Spring
Fulfills General Education - Mode 5
Fulfills General Education - Knowledge of Physical & Natural World

BIO* 122: General Biology II
4 Credits
(Formerly BIO 102)
This course is a study of unicellular and multicellular organisms and their evolutionary relationships. Both plants and animals are discussed. Some dissection is required. Class: 3 hours per week. Laboratory: 3 hours per week.
Prerequisites: BIO* 121 with a grade "C" or better.
Offered: Fall, Spring
Fulfills General Education - Mode 5
Fulfills General Education - Knowledge of Physical & Natural World

BIO* 153: Survey of Botany
3 Credits
This course will explore basic botanical principles by having students “learning in community”. Students will learn basic botany while concurrently enrolled in a designated ART course, Botanical Drawing, that teaches them to accurately and artistically portray the cells, tissues, organs and structures of various plants. Students will construct a detailed portfolio of the plants and structures studied and be assessed on botanical accuracy as well as artistic interpretation.
Prerequisites: ENG* 101
Offered: Fall, Spring

BIO* 173: Introduction to Ecology
4 Credits
This course is a one semester introduction to ecological principles focusing on the factors that influence the distribution and abundance of organisms. This includes a survey of the interactions of organisms with each other and with the physical environment. These interactions will be studied in the context of evolutionary history and biodiversity. Population, community, and ecosystem level ecology will be examined, especially in light of man's influence on nature. This course is designed for both environmental science majors and non-majors. Class: 3 hours per week. Laboratory: 3 hours per week.
Prerequisites: Eligibility for ENG* 101.
Offered: Fall, Spring
Fulfills General Education - Mode 5
Fulfills General Education - Knowledge of Physical & Natural World
BIO* 211: Anatomy and Physiology I
4 Credits
(Formerly BIO 152)
The anatomy and physiology of the integumentary, skeletal, muscular, nervous and endocrine organ systems are discussed and explored in appropriate laboratory investigations which include some dissection. Class: 3 hours per week. Laboratory: 3 hours per week.
Prerequisites: BIO* 121, or BIO* 115, or CHE* 111, and eligibility for ENG* 101.
Offered: Fall, Spring
Fulfills General Education - Mode 5

BIO* 212: Anatomy and Physiology II
4 Credits
(Formerly BIO 153)
The anatomy and physiology of the special senses, digestive, respiratory, cardio-vascular, lymphatic, urinary and reproductive organ systems are discussed and explored in appropriate laboratory investigations which include some dissection. Class: 3 hours per week. Laboratory: 3 hours per week.
Prerequisites: Completion of BIO* 211 with a grade of C or higher
Offered: Fall, Spring, Summer
Fulfills General Education - Mode 5

BIO* 235: Microbiology
4 Credits
(Formerly BIO 141)
This course is designed to provide students with an introduction to microbiology. Students will learn the fundamentals of microbiology, survey the world of microbial organisms, and study the interactions between microbes, their hosts, and their effects on the environment. There will also be laboratory exercises each week that will teach the basics of handling, culturing, and identifying microbes
Prerequisites: BIO* 105, BIO* 115, BIO* 121 or BIO* 211, and CHE* 111 or higher, and ENG* 101 with a grade of "C" or better in all prerequisites.
Offered: Fall, Spring, Summer
Fulfills General Education - Mode 5

BIO* 260: Principles of Genetics
3 Credits
(Formerly BIO 260)
This intermediate level course is designed to extend the understanding of college level biology students to encompass an understanding of heredity and of the hereditary material with particular attention to current theories.
Prerequisites: BIO* 121 and MAT* 095 with a grade C or better.
Offered: Fall, Spring
Fulfills General Education - Mode 5

Business, Entrepreneurship

BES* 218: Entrepreneurship
3 Credits
(Formerly BES* 118)
This course introduces the student to the fundamentals of entrepreneurship. The students will gain the knowledge and skills necessary to research and begin a small business. Explores opportunity analysis, startup expenses, forms of business ownership, site selection, and sources of funding. Students research and compare buying an existing business, starting a new business and franchising. Also review human resources, marketing, management, accounting and legal aspects of business.
Prerequisites: Completion of ENG* 101 with C- or better
Offered: Fall, Spring

**BES* 219: Management and Growth - Small Business**

3 Credits
This course builds upon the knowledge and skills needed to manage and grow a small business. It emphasizes the fundamentals of management specific to a small business owner. The course will review the financial health of the business. It will explore strategic planning and growth. Case studies will be utilized for insight into both successful and unsuccessful businesses.

Prerequisites: Completion of ENG* 101 with C- or better
Offered: Spring

**Business, Finance**

**BFN* 111: Financial Literacy**

3 Credits
This course will teach students essential decision-making skills they must apply and use to become wise and knowledgeable consumers, savers, investors, users of credit, money managers, citizens, and members of a global workforce and society. This course will use a “hands-on” instructional approach involving techniques such as problem solving, reasoning, simulation, and direct application of the included concepts to the world in which students live. The course is designed to incorporate concepts and skills from mathematics, language arts, social science, applied technology, and character education. (This class may not be used for credit towards program requirements for all business and accounting majors).

Prerequisites: Eligibility for ENG* 101 or by permission of instructor
Offered: Occasionally

**BFN* 120: Investment Basics**

1 Credits
(Formerly FNCE 150)
Introduction to the basics of money management: budgeting, saving, and investing. Students will develop an understanding of reconciling bank or brokerage statements, reading stock, bond, and mutual fund listings in The Wall Street Journal, and learning what to look for in a mutual fund prospectus and an annuity contract. Students will also be introduced to various retirement programs (IRA, Keogh, 401k, 403b, etc.).

Prerequisites: None
Offered: Occasionally

**BFN* 202: Corporate Finance**

4 Credits
(Formerly BUS 241/FNCE 241)
A study of the principles and techniques of financial management, covering money and capital markets, financial analysis, working capital management, long term financing, time value of money, risk, leverage, and cost of capital.

Prerequisites: Eligibility for ENG* 101 and "C" or better in ACC* 118
Offered: Fall, Spring

**Business, Financial Planning**

**BFP* 210: Fundamentals of Personal Financial Planning**

4 Credits
(Formerly FNCE 210)
A survey of the financial planning process, that includes regulations affecting financial planners, construction of financial statements and analysis of client’s current financial situation, client communications, time value of
money and an overview of the elements related to financial planning. In addition, principles of risk management, including the insurance contracts and different types of insurance will also be covered. Students should understand financial statements and have and know how to use a financial calculator (e.g. HP 12-C) prior to taking this course.

**Prerequisites:** Eligibility for ENG* 101

**Offered:** Fall

**BFP* 220: Risk Management**

3 Credits  
*Formerly FNCE 220*

Principles of risk management; the insurance contract and concepts relating to life insurance, property and liability insurance, medical and disability insurance, and social insurance; case analysis evaluating insurance needs; and selecting appropriate risk management techniques are covered. Time value of money calculations using financial calculator.

**Prerequisites:** Eligibility for ENG* 101

**Offered:** Occasionally

**BFP* 230: Investment Management**

3 Credits  
*Formerly FNCE 230*

Principles of investment management, including the study of stocks, bonds, government securities, mutual funds, futures, options, annuities and tangible assets for investment to construct and manage an investment portfolio with knowledge of risk and tax considerations are covered. Time value of money calculations using financial calculator.

**Prerequisites:** BFP* 210 or eligibility for ENG* 101

**Offered:** Occasionally

**BFP* 250: Retirement Planning and Employee Benefits**

3 Credits  
*Formerly FNCE 250*

A survey of the key terms and concepts of retirement planning and analysis of employee benefit programs using time value of money calculations. Students will study both private corporate pension plans and government programs, including social security and Medicare, as well as qualified and nonqualified corporate programs.

**Prerequisites:** BFP* 210 or eligibility for ENG* 101

**Offered:** Occasionally

**BFP* 260: Estate Planning**

3 Credits  
*Formerly FNCE 260*

A survey of principles of estate planning, including discussion of descent and distribution, wills, intestacy, probate and administration, Probate Court, estate and gift tax returns, and fiduciary accounting.

**Prerequisites:** BFP* 210 or eligibility for ENG* 101

**Offered:** Occasionally

**BFP* 265: Case Study and Analysis**

3 Credits  
*Formerly FNCE 265*

A course covering case study and analysis and integration of the six major areas of personal financial planning. Upon completion of the course, students will be able to analyze a case and prepare an appropriate financial plan for a variety of clients.

**Prerequisites:** BFP* 210, BFP* 230, BFP* 250, BFP* 260, ACC* 243 or permission of the program
Business, General

BBG* 101: Introduction to Business
3 Credits
(Formerly BUS 111)
This course provides a survey of major business topics such as management, marketing, accounting, finance, computer science, organizational behavior, production, and the social and economic environment of business.

Prerequisites: Eligibility for ENG* 093

Offered: Occasionally

BBG* 108: Business & Consumer Finance
3 Credits
(Formerly QM 110)
A broad introduction to mathematical problems most commonly associated with business-oriented careers. Topics presented include bank reconciliation, payroll, simple and compound interest, credit cards, mortgages, depreciation and inventory. This course provides students with sufficient background to assist them as consumer decision-makers and future employees of business firms.

Prerequisites: Eligibility for ENG* 101

Offered: Fall, Spring

BBG* 208: Business and Strategic Planning
3 Credits
(Formerly BUS 220)
This course will provide students with a detailed level of understanding of both Business and Strategic Plans. Upon researching and evaluating plans for small businesses, students will prepare a Business Plan, which would be used, for exploring a business opportunity or soliciting funds and a Strategic Plan to ensure the health and direction of a business.

Prerequisites: Eligibility for ENG* 101 and BES* 218 or permission of the instructor.

Offered: Occasionally

BBG* 215: Global Business
3 Credits
(Formerly BUS 271)
This course provides students with a foundation for conducting international business and a general understanding of international corporate and government operations. The course will undertake a comprehensive overview of international business designed to provide a global perspective on international trade including topics in: foreign investment, international marketing, the operations of multinational corporations, and government relations.

Prerequisites: Eligibility for ENG* 101

Offered: Occasionally

BBG* 216: Business in Developing Nations
3 Credits
(Formerly BUS 272)
This course provides students interested in developing nations or the Third World with a background for conducting business or working for the U.S. government in these nations. Focus on special regions of the world will include: Africa, Latin America, Asia, Eastern Europe and the Middle East.
Prerequisites: Eligibility for ENG* 101
Offered: Occasionally

BBG* 234: Legal Environment of Business
3 Credits
This course introduces the student to the structure of the American legal system and its impact on the operations of American business. Ethics and social responsibility are examined from many perspectives, including that of decision-makers and stakeholders. Major aspects of government regulation of business are explored, including product liability, securities regulation, employment and labor law, and intellectual property. The course also examines fiduciary duties and tort and criminal liability.
Prerequisites: Eligibility for ENG* 101
Offered: Fall, Spring

BBG* 236: Commercial Law
3 Credits
This course provides a framework for the legal and ethical considerations impacting many basic commercial transactions, and deals with the formation of contracts and the rights and responsibilities of contracting parties. Specific topics included are contract law and the Uniform Commercial Code, including sales, secured transactions, and negotiable instruments. Also covered are aspects of agency, partnerships, corporations, limited partnerships, limited liability companies, and bankruptcy.
Prerequisites: POL* 120 or eligibility for ENG* 101 or permission of instructor
Offered: Fall, Spring
Cross listed as: LGL* 212

BBG* 240: Business Ethics
3 Credits
(Formerly BUS 215/PHL 115)
This course will examine the full extent of the relationship between business and ethics: The philosophical foundation for capitalism will be examined as will the application of ethical values and principles to employee/employer interactions.
Prerequisites: Students are strongly urged to take PHL* 101 or the equivalent; or any 100 or 200 level English course to prepare for this course.
Offered: Occasionally
Cross listed as: PHL* 115

BBG* 260: History of American Business
3 Credits
(Formerly BUS 244/HIST 244)
The goal of the course is to provide students interested in management with an historical, philosophical and economic framework for dealing with a rapidly changing business environment.
Prerequisites: Eligibility for ENG* 093 or concurrently taking ENG* 066.
Offered: Occasionally
Cross listed as: HIS* 221

BBG* 295: Co-op Work Experience I
3 Credits
(Formerly BUS 270)
This course provides students the opportunity to apply classroom theory in an actual work setting. Students may be placed in a variety of work settings as related to their program of study including corporations, small businesses, financial institutions and governmental agencies.
Prerequisites: 15 completed credit hours in Business Administration, Accounting, Computer Information Systems or Marketing programs.

Offered: Fall, Spring

**Business, Management**

**BMG* 202: Principles of Management**
3 Credits
(Formerly BMG 101)
This course is an analysis of principles, techniques and the major functions (planning, organizing, and leading) of business enterprise management.

Prerequisites: Completion of ENG* 101 with C- or better

Offered: Fall, Spring

**BMG* 204: Managerial Communication**
3 Credits
(Formerly BUS 214)
This is a practical course in oral and written managerial communication skills, covering the writing of letters, memos and reports, editing techniques, and the preparation of resumes and cover letters.

Prerequisites: Completion of ENG* 101 with C- or better

Offered: Fall, Spring

**BMG* 210: Organizational Behavior**
3 Credits
(Formerly BUS 240)
A survey of the psychological factors that influence the individual in the work setting. Includes employee attitudes, motivation, group dynamics, decision making, leadership, assessment and training as an introduction to human resource management.

Prerequisites: Completion of ENG* 101 with C- or better

Offered: Fall, Spring

**Business, Marketing**

**BMK* 140: Retailing**
3 Credits
(Formerly BUS 252)
A study of retailing methods and institutions including analysis of their behavior in a competitive environment.

Prerequisites: Eligibility for ENG* 101

Offered: Occasionally

**BMK* 201: Principles of Marketing**
3 Credits
(Formerly BUS 121)
This course covers marketing methods and institutions, including analysis and interrelationship of the marketing mix. Application of basic management and marketing strategy planning methods, and performance computations related to marketing efficiency are also covered.

Prerequisites: C- or higher in ENG* 101 and in ACC* 115 or permission of instructor

Offered: Fall, Spring

**BMK* 217: Electronic Commerce**
4 Credits
(Formerly BUS 250)
This course will allow students to explore the major opportunities, limitations, and issues of managing business on the Web today. Students will learn what electronic commerce is, how it is being conducted and managed, and its major opportunities, limitations, issues, and risks, taking a managerial orientation and interdisciplinary approach. Real world cases are offered with each chapter to offer an in-depth analysis of topics.

**Prerequisites:** BES* 218, and CSA* 115 which may be taken concurrently, or permission of the instructor.

**Offered:** Occasionally

**BMK* 220: Sales**
3 Credits
*(Formerly BUS 221)*
This course is an introduction to the principles, methods and techniques of selling, and the application of these principles through individual sales demonstrations.

**Prerequisites:** Eligibility for ENG* 101

**Offered:** Occasionally

**BMK* 241: Principles of Advertising**
3 Credits
*(Formerly BUS 231)*
This course is a study of advertising strategy, tactics and techniques, including media selection, ad preparation, market research methods, and program evaluation.

**Prerequisites:** BMK* 201 or permission of the instructor.

**Offered:** Occasionally

**BMK* 245: Integrated Marketing Communications**
3 Credits
Marketing promotion has changed from an emphasis on advertising, to an understanding and use of an Integrated Marketing Communications (IMC) perspective that reflects strategy and full use of promotional tools to reach target audiences. This course will cover all aspects of IMC, including the five promotional tools: advertising, sales promotion, public relations, direct marketing and personal selling. Students will apply concepts to situations and create an original IMC plan for a client.

**Prerequisites:** ENG* 101, and BMK* 201 or BMK* 220

**Offered:** Occasionally

**BMK* 260: Relationship Marketing**
3 Credits
*(Formerly BUS 260)*
The purpose of this course is to give the student a solid foundation in customer service systems. Students will learn concepts and skills necessary to perform effectively in a customer driven service economy. This course will focus on the concepts and applications of communications, strategic planning, teamwork, coaching, and vision building, as well as an introduction to Total Quality Management. This course emphasizes the importance of development and retention of repeat customers and business buyers.

**Prerequisites:** Eligibility for ENG* 101.

**Offered:** Spring

**Cross listed as:** HSP* 238

**Business Office Technology**

**BOT* 100: Computer Literacy for College Success**
2 Credits
This is a basic skill-centered course tailored to the needs of the individual student. This course is designed to help prepare the student to type simple letters and reports, prepare basic PowerPoint presentations, use...
Blackboard Vista, access the Internet, and use email for college success. This course is not designed for BOT majors but can be taken for personal growth. Students are strongly encouraged to also register for BOT* 101 in conjunction with this course.

**Prerequisites:** None

**Offered:** Occasionally

**BOT* 101: Basic Keyboarding**

1 Credit  
*(Formerly BOT 100A)*

Keyboard mastery for computer input. BOT Lab instruction.

**Prerequisites:** None

**Offered:** Fall, Spring

**BOT* 111: Keyboarding for Info Pro I**

3 Credits  
*(Formerly BOT 107)*

Students will learn input mastery using keyboarding and word processing software. Using a hands-on instructional approach, students will improve their keying speed and accuracy, learn to prepare standard types of business communications in both printed and electronic forms, and further develop their proofreading skills.

**Prerequisites:** None

**Offered:** Fall, Spring

**BOT* 112: Keyboarding for Info Pro II**

3 Credits  
*(Formerly BOT 108)*

This course is an intensive review of the keyboard emphasizing further development of speed and accuracy, proofreading techniques, and comprehensive word processing skills. Students will learn the intermediate and advanced features of Microsoft Word.

**Prerequisites:** C- or better in BOT* 111

**Offered:** Fall, Spring

**BOT* 122: Writing Procedures**

3 Credits  
*(Formerly BOT 103)*

Through the review and analysis of writing concepts and grammatical rules, students will gain the necessary skills to produce professional business communications. As a result of their learning, students will be able to write concise, complete, and correct usable office communications and reports.

**Prerequisites:** None

**Offered:** Fall, Spring

**BOT* 137: Word Processing Applications**

3 Credits  
*(Formerly BOT 124)*

Students will learn the basic skills of Microsoft Word software which can be applied to either a career setting or for one's own personal productivity.

**Prerequisites:** BOT* 111 or 35 words-per-minute keyboarding skill

**Offered:** Occasionally

**BOT* 139: Grammar, Usage and Style**

3 Credits  
*(Formerly BOT 203)*
This course helps students develop a command of standards and conventions of written English. It is also an advanced course designed to hone communication skills, including editing and proofreading documents.

**Prerequisites:** Eligibility for ENG* 101 or permission of the instructor

**Offered:** Spring

**Cross listed as:** ENG* 203

**BOT* 164: Office Accounting**

3 Credits

(Formerly BOT 224)

Provides students with knowledge of the accounting cycle and procedures for professional offices. Students will also be prepared to handle personal financial management.

**Prerequisites:** None

**Offered:** Fall

**BOT* 171: Legal Documents**

3 Credits

(Formerly BOT 233)

Students will be introduced to legal terminology and become familiar with widely used legal forms and documents. BOT Lab instruction.

**Prerequisites:** BOT* 111 and BOT* 137 can be taken before or concurrently with this course

**Offered:** Fall, Spring

**BOT* 180: Medical Terminology**

3 Credits

(Formerly BOT 241)

Introduction and mastery of medical terminology with understanding of word building systems. Prefixes, suffixes, word roots, combining forms, special endings, plural forms, abbreviations, and symbols are included in the content. Emphasis on anatomy and physiology of body structure and functions, along with an understanding of signs and symptoms leading to diagnostic and acceptable treatment procedures. BOT Lab or online instruction.

**Prerequisites:** None

**Offered:** Fall, Spring

**BOT* 181: Medical Coding I**

3 Credits

(Formerly BOT 140)

This course is an in-depth study of basic International Classification of Disease, Clinical Modification (ICD-9-CM with introduction and overview of ICD-10 changes) and Current Procedural Terminology (CPT-4) coding. Diagnoses, procedures, signs and symptoms will be studied and coded by students using the necessary textbooks. The flow of medical records from physician’s office to hospital discharge will be tracked for insurance, risk management and case study purposes.

**Prerequisites:** BOT* 180

**Offered:** Fall, Spring

**BOT* 182: Medical Coding II**

3 Credits

(Formerly BOT 141)

This course is a continuation of International Classification of Disease, Clinical Modification (ICD-9-CM with introduction and overview of ICD-10 changes) and Current Procedural Terminology (CPT-4) coding. Students will utilize medical records and case histories to code the diagnoses and procedures according to the level of care received in the appropriate medical facilities.
Prerequisites: BOT* 181
Offered: Fall, Spring

**BOT* 220: Computerized Communication**

3 Credits
This hands-on course will prepare the office support professional to use personal information management applications, such as Microsoft Outlook, and modern office communication tools including presentation/voice recognition software and web conferencing. Some selected topics include how to create and manage email, plan and schedule meetings, appointments and events, and manage contacts and tasks. Students will also explore emerging software to provide techniques for maintaining productivity. Basic keyboarding ability recommended.

Prerequisites: BOT* 111 or permission of instructor
Offered: Fall, Spring

**BOT* 230: Microsoft Office Suite Applications**

3 Credits
*(Formerly BOT 130)*
This course provides students with further advancement and enhancement of their office skills using the Microsoft Office Suite. Fundamentals of Microsoft Word, Excel, PowerPoint, and Access will prepare students for tasks performed by administrative personnel in today’s office environment.

Prerequisites: BOT* 111 or permission of instructor
Offered: Occasionally

**BOT* 231: Advanced Microsoft Office Applications**

3 Credits
Students will use the advanced features of the Microsoft Office Suite to plan, initiate and disseminate office documents, spreadsheets, databases, and electronic presentations. Class activities and projects will focus on the mastery of advanced software application tasks performed by administrative professionals in today's office.

Prerequisites: BOT* 230 or CSA* 105
Offered: Spring

**BOT* 251: Administrative Procedures**

3 Credits
*(Formerly BOT 222)*
Application of previously acquired office skills to the tasks and responsibilities encountered by the administrative professional in today’s business office. Topics include: professional image, human relations, job attitude, time management, decision making, technology and records management. Office projects relevant to students’ programs will also be included.

Prerequisites: BOT* 111
Offered: Spring

**BOT* 270: Legal Terminology and Transcription**

3 Credits
*(Formerly BOT 234)*
This course is a continuation of BOT* 171 including a review of legal terminology and includes machine transcription of legal materials in the preparation of legal documents. BOT Lab instruction.

Prerequisites: BOT* 171
Offered: Fall, Spring
BOT* 280: Medical Transcription and Document Production
3 Credits
(Formerly BOT 210)
This course teaches the fundamentals of machine transcription and the development of medical reports, patient records, histories/physicals, and correspondence using appropriate reference sources. Keyboarding skills, grammar, punctuation, spelling, capitalization, and proofreading are covered. BOT Lab instruction.
Prerequisites: BOT* 111, BOT* 180; Must be eligible for ENG* 101
Offered: Fall, Spring

BOT* 282: Medical Administrative Procedures
3 Credits
This course prepares medical administrative professionals with relevant/real-world medical administrative procedures and medical office simulations to prepare them for hands-on coordination of the administrative function in the medical office. Topics include medical ethics laws and compliance, medical practice financials, introduction and overview of insurance practices with exposure to clinical and diagnoses coding importance, management of health record information, effective office verbal and written communications, and preparation for employment.
Prerequisites: BOT* 112 or permission of instructor, and ENG* 101 eligibility.
Offered: Spring

BOT* 286: Medical Machine Transcription
3 Credits
(Formerly BOT 211)
Students will further develop of medical machine transcription skills demonstrating the ability to effectively incorporate English usage, medical terminology, and the ability to proofread and edit medical documentation. Students will meet progressively demanding medical transcription accuracy and productivity standards. BOT Lab instruction.
Prerequisites: BOT* 280
Offered: Fall, Spring

BOT* 287: Foundations/Management Medical Insurance
3 Credits
(Formerly BOT 142)
This course is designed to enable students to define, explain, and understand the types of health insurance policies, contracts, and guideposts. Comparisons of private insurances, HMOs, federal and state programs and entitlements, as well as completion of insurance forms, and handling/tracking medical information is included. Emphasis will be placed on current healthcare law and medical record confidentiality.
Prerequisites: BOT* 180
Offered: Spring

BOT* 288: Medical Practice Management Software Applications
3 Credits
This hands-on computer applications course prepares medical administrative professionals to efficiently use practice management software in managing the operational, patient and financial data in medical offices and hospital environments. Software skills covered will include appointment scheduling, patient registration, procedure posting, electronic payment posting, patient billing and collections, report generation and file maintenance.
Prerequisites: Eligibility for ENG* 101, and BOT* 112 and BOT* 181
Offered: Fall
BOT* 289: Practical Pharmacology for the Medical Office
3 Credits
This course is designed to provide information about medications, side effects, and interactions of drugs for office administration personnel who maintain medical records, and for other allied health occupations. BOT Lab instruction.
Prerequisites: BOT* 180.
Offered: Fall, Spring

BOT* 296: Cooperative/Work Experience
3 Credits
(Formerly BOT 270)
This course provides students with the opportunity to apply classroom theory in an actual work setting related to their program of study.
Prerequisites: 12 completed credit hours in Administrative Assistant, Legal; Administrative Assistant, Medical; or Administrative Assistant, Office and the completion of BOT* 251.
Offered: Fall, Spring, Summer

Computer-Aided Design

CAD* 110: Introduction to CAD
3 Credits
(Formerly CAD 101)
An introduction to the techniques of generating graphic images with computers, using AutoCAD. Topics include: overview of CAD technology, computer technology, hardware descriptions and requirements, file manipulation and management, two-dimensional geometric construction, symbol library creation, dimensioning, scaling, sectioning, plotting, detail and assembly drawing including tolerance studies.
Prerequisites: None
Offered: Fall, Spring, Summer

CAD* 218: CAD 3d Mechanical (AutoCAD)
3 Credits
(Formerly CAD 102)
A continuation course in industrial drafting concepts using a CAD system, specifically oriented towards three-dimensional design of manufactured parts using AutoCAD.
Prerequisites: CAD* 110
Offered: Fall, Spring

CAD* 220: Parametric Design (Solidworks)
3 Credits
Introduction to computer-based design using SolidWorks® parametric 3D CAD software. The course focuses on Parametric Modeling and topics include: Design Intent and Process, Sketching Techniques, Model Development Techniques, Process-Specific Modeling, Design Changes, Editing Models, Patterning and Assembly Techniques. Students will participate in mostly individual and some group design projects as appropriate.
Prerequisites: CAD* 110
Offered: Spring, Summer

CAD* 271: CAD Solids Mechanical Pro/ENGINEER
3 Credits
(Formerly CAD 105)
An introduction to parametric design utilizing the Pro/ENGINEER software technology. 3D objects are made
and orthographic drawings are created.

**Prerequisites:** CAD* 218 or permission of instructor

**Offered:** Occasionally

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**Chemistry**

**CHE* 111: Concepts of Chemistry**

4 Credits

*(Formerly CHEM 110)*

A brief survey of atomic structure, chemical bonding, stoichiometry, periodicity, properties of gases, solutions, acid-base theory and an introduction to kinetics and equilibria will be taught. This is a one-semester course in general chemistry. Strongly recommended for students with no prior chemistry experience. Scientific calculator required. Class meets for 6 hours per week for integrated lecture and laboratory.

**Prerequisites:** MAT* 075 or math placement test. Students who have passed a higher level chemistry class will not receive credit for this course.

**Offered:** Fall, Spring, Summer

**Fulfills General Education - Mode 5**

**CHE* 121: General Chemistry I**

4 Credits

*(Formerly CHEM 111)*

The principles of chemistry, including atomic structure, periodicity, stoichiometry, reactions in solution, thermo-chemistry, chemical bonding, molecular structure and geometry, and properties of gases, will be taught. Students with no prior chemistry experience should strongly consider enrolling in CHE* 111 first. Scientific calculator required. Class: 3 hours per week. Laboratory: 3 hours per week.

**Prerequisites:** MAT* 095 or math placement test.

**Offered:** Fall, Spring, Summer

**Fulfills General Education - Mode 5**

**CHE* 122: General Chemistry II**

4 Credits

*(Formerly CHEM 112)*

A continuation of the principles of chemistry, including intermolecular forces, properties of liquids and solids, physical properties of solutions, chemical kinetics, general chemical equilibria, acid-base theory and equilibria, solubility equilibria, electrochemistry and coordination compounds. Scientific calculator required. Class: 3 hours per week. Laboratory: 3 hours per week.

**Prerequisites:** CHE* 121

**Offered:** Fall, Spring, Summer

**Fulfills General Education - Mode 5**

**CHE* 210: Introduction to Organic Chemistry**

4 Credits

*(Formerly CHEM 201)*

The principles of organic chemistry, emphasizing functional groups, molecular structure, nomenclature, and organic reactions; synthetic logic and basic methods of organic analysis will be included. Scientific calculator required. Class: 3 hours per week. Laboratory: 3 hours per week.

**Prerequisites:** CHE* 121

**Offered:** Spring

**Fulfills General Education - Mode 5**
CHE* 211: Organic Chemistry I
4 Credits
(Formerly CHEM 211)
A study of the structure, properties, reactions, and nomenclature of aliphatic hydrocarbons and their derivatives, including alkyl halides, alcohols and ethers. Emphasis will be given to mechanisms, stereochemistry, and synthetic considerations. Scientific calculator required. Class: 3 hours per week. Laboratory: 3 hours per week.
Prerequisites: CHE* 122
Offered: Fall
Fulfills General Education - Mode 5

CHE* 212: Organic Chemistry II
4 Credits
(Formerly CHEM 212)
A study of the structure, properties, reactions, and nomenclature of aromatic compounds, aldehydes and ketones, carboxylic acids and their derivatives, amines, addition and condensation polymers, and biochemical molecules. Additional topics will include the role and use of spectroscopy, reactions involving carbanions, and alpha-beta unsaturated compounds. Scientific calculator required. Class: 3 hours per week. Laboratory: 3 hours per week.
Prerequisites: CHE* 211
Offered: Spring
Fulfills General Education - Mode 5

Communication

ART* 206: Film Study
3 Credits
(Formerly FA 171)
The viewing, discussion and analysis (written and oral) of representative films from the early years of the industry to the present will be taught.
Prerequisites: Eligibility for ENG* 101
Offered: Fall,Spring,Summer
Cross listed as: COM* 154 Fulfills General Education - Mode 1
Fulfills General Education - Knowledge of Human Thought & Expression

COM* 100: Introduction to Communication
3 Credits
Communication is fundamental to human social life. In this introductory course to the discipline, students will learn about a broad range of theories and processes of communication, examining communication as a cultural practice that shapes meaning in peoples’ beliefs, attitudes, values, and practices across situations.
Prerequisites: ENG* 101
Offered: Fall,Spring

COM* 101: Introduction to Mass Communication
3 Credits
(Formerly COMM 208)
This course is a survey of the American mass media and communication. Lectures and discussions will focus on the various print and electronic mass media industries, and the impact of mass communication on our society. The course is designed as an introductory course for those students who plan to major in communication and for those who want to be informed about the development of the influence of modern mass media.
Prerequisites: Eligibility for ENG* 101
Offered: Fall,Spring
Fulfills General Education - Mode 3
COM* 108: Contemporary Issues in Media
3 Credits
The purpose of this course is to enable students to develop their media literacy as news consumers. Through examination of the significant issues in the American media, students will learn how to “read” the news beyond simply digesting the words. For the informed citizen as well as the future journalist, the course will provide an ethical framework for understanding and gathering the news.
Prerequisites: None
Offered: Fall, Spring

COM* 113: Social Media in Contemporary Society
3 Credits
Interpersonal relationships and community have traditionally been conceptualized as created through face-to-face interaction. However, with the advent and proliferation of new communication technologies, interpersonal relationships and communities have taken on a new face and form, transcending space and time, challenging our definitions and perceptions of what "relationships" and "community" are and can be. In this course, we will examine theories and concepts pertaining to interpersonal relationships and community, literature that applies these to new technologies, as well as literature that offers new findings and theories on the interfaces between them. We will also critically examine the role that new technologies are having on our thought processes, education, civic and social life.
Prerequisites: COM* 100
Offered: Occasionally

COM* 145: Sports on Television
3 Credits
Sports on Television will look at the role, scope and current status of sports on American television. It will cover the processes and people involved in the decisions that affect the programming and production of sports television. The economic and cultural impact of sports on television will also be studied.
Prerequisites: None
Offered: Fall, Spring

COM* 154: Film Study and Appreciation
3 Credits
(Formerly COMM 171)
The viewing, discussion and analysis (written and oral) of representative films from the early years of the industry to the present will be taught.
Prerequisites: Eligibility for ENG* 101
Offered: Fall, Spring, Summer
Cross listed as: ART* 206 Fulfills General Education - Mode 3

COM* 166: Video/Filmmaking
3 Credits
(Formerly COMM 176)
A creative workshop in which students will work in groups and make their own movies. Students work with video camcorders and editors. Students will learn scripting, shooting, editing and audio production techniques.
Prerequisites: None
Offered: Fall, Spring
Cross listed as: ART* 185
COM* 172: Interpersonal Communication
3 Credits
(Formerly COMM 220)
The focus of this course is on the theory and process of communication in both professional and personal interpersonal relationships. The course examines the theoretical and practical application of communication as it relates to family, friends, work and intimate relationships.
Prerequisites: ENG* 101
Offered: Spring
Fulfills General Education - Mode 3

COM* 173: Public Speaking
3 Credits
(Formerly COMM 213)
This course is designed to encourage students to develop their speaking and listening skills in order to become more confident communicators. The course introduced students to communication as an interactive process and emphasizes developing effective public presentation skills. Instruction stresses organization, research, writing, delivery and audience adaptation.
Prerequisites: Eligibility for ENG* 093
Offered: Fall, Spring, Summer
Fulfills General Education - Mode 3
Fulfills General Education - Knowledge of Human Thought & Expression

COM* 173H: Honors Public Speaking
3 Credits
This course in public speaking will involve the development of individual oral communication skills through persuasive, informative and epideictic (ceremonial) speeches, and will also emphasize the importance of public speaking in a democratic society. Since ancient Greek and Roman times, public speaking has been taught both as the foundation of a liberal education and as an essential skill of democratic leadership. While standard sections of COM* 173 focus on general public speaking skills, in this Honors section of COM* 173 students will be asked to also analyze the speeches of historical and contemporary speakers in order to develop a greater appreciation of the importance of public speaking in professional, personal and civic life. Students taking this course should have at least some familiarity with public speaking, but extensive experience is not required. Students who are eligible for ENG* 101 and who welcome an increased level of challenge should sign up for this Honors section.
Prerequisites: Eligibility for ENG* 101
Offered: Fall, Spring

COM* 177: Broadcasting Performance
3 Credits
(Formerly COMM 206)
The rudiments of broadcast announcing in a studio setting: clear speech, presence, projection and intimacy will be discussed. This course will cover radio announcing. Proper commercial/PSA preparation and broadcast delivery of the commercial/PSA are stressed through classroom and on-microphone exercises, including development, enunciation, pronunciation, interpretation, integration, and pacing. Students are critiqued on an individual basis, following the evaluation of laboratory projects.
Prerequisites: None
Offered: Fall, Spring

COM* 186: Computer Animation
3 Credits
(Formerly COMM 251)
Students will learn how to use the computer to create animated presentations. The course will cover basic animation techniques as they apply to the digital environment as well as traditional skills such as storyboarding and script preparation. The software used will be Adobe Flash. The class is limited to 24 students. Studio: 6 hours per week.

**Prerequisites:** DGA* 111, DGA* 212 or COM* 213 or permission of instructor.

**Offered:** Fall, Spring

**Cross listed as:** DGA* 261

**Fulfills General Education - Mode 1**

**COM* 201: Introduction to Public Relations**

3 Credits

(Formerly COMM 201)

A comprehensive survey of public relations principles and practices: fact-finding, planning and programming, action and communication, evaluation. This course covers relationships between organizations and their publics, and the effective use of media. Students will plan a complete public relations program.

**Prerequisites:** ENG* 101

**Offered:** Fall

**COM* 202: Intercultural Communication**

3 Credits

An introduction to the field of intercultural communication. This course studies how culture and communication interact. This course is designed to increase awareness of the cultural self and to help develop greater competence in communicating across cultural lines. Cultural privilege and power will be explored, as well as processes for mediating intercultural conflict. Finally, the course will examine models of how people learn cultural identity and develop intercultural sensitivity. Throughout the course, examples will be drawn from cultures of Europe, Asia, Africa, the Middle East and the Americas to help the student gain a global understanding of the issues involved in intercultural communication.

**Prerequisites:** ENG* 101 and any 100-level Social Science Course.

**COM* 209: Gender and Communication**

3 Credits

(Formerly COMM 222)

Gender and Communication is a course dealing with issues of language, speech and perception as they relate to gender. Students become familiar with the various theoretical approaches to gender and their implications for the study of communication. They explore how women and men approach same and opposite sex interactions and relationships in personal, social and professional contexts.

**Prerequisites:** ENG* 101

**Offered:** Occasionally

**Fulfills General Education - Mode 3**

**COM* 211: Screenwriting**

3 Credits

An introduction to the basics of scriptwriting for television and film. The course covers the formatting of scripts for both television and film as well as market considerations. Elements of storytelling including characterization and plotting will be emphasized.

**Prerequisites:** C or higher in ENG* 101

**Offered:** Fall, Spring

**COM* 213: Electronic Publishing**

3 Credits

(Formerly COMM 290)

In this course the student learns to use the Macintosh computer and In Design Software to create a variety of
publications ranging from simple flyers to four page newsletters.

**Prerequisites:** None  
**Offered:** Fall, Spring

**COM* 222: Reporting and Writing News Stories.**  
3 Credits  
(Formerly COMM 281)  
This course covers news gathering and reporting within the context of news criteria. Interviewing, ethics and law are introduced.  
**Prerequisites:** ENG* 101 with a grade of C+ or better  
**Offered:** Fall, Spring

**COM* 225: Photojournalism**  
3 Credits  
An introduction to photojournalism and digital photography including hardware and software, camera handling and creative controls, file management and image editing using Adobe Photoshop. History, ethics, composition, lighting and visual communication will be investigated. Through demonstrations and assignments (including assignments for the student newspaper), a survey of imagery and a final project, students will be introduced to the basic vocabulary, concepts, tools and techniques of photography and photojournalism. Students must own a digital camera with manual and/or aperture priority and shutter priority exposure modes. Basic computer experience preferred.  
**Prerequisites:** None  
**Offered:** Fall, Spring  
**Cross listed as:** ART* 283

**COM* 229: Creative Writing, Non Fiction.**  
3 Credits  
(Formerly COMM 282)  
This course covers: Types of features considered most in demand such as profile, travel, health and consumer issues. It also introduces students to the freelance market.  
**Prerequisites:** ENG* 101 with a grade of C+ or better  
**Offered:** Spring  
**Fulfills General Education - Mode 3**

**COM* 240: Broadcast/TV Production**  
4 Credits  
(Formerly COMM 210)  
The fundamentals of television production are presented in this lab course in the College’s TV studio. Scripting, camera set-ups, how to work with talent, and the control room side of TV production are topics that will be covered.  
**Prerequisites:** None  
**Offered:** Fall

**COM* 242: Advanced Broadcast/TV Production**  
4 Credits  
(Formerly COMM 211)  
This course is designed to give students further training in broadcast/TV production. The course will focus on using electronic news gathering and electronic field production formats and integrating them into studio productions. Students will learn about field production, including lighting, audio and camera techniques. Students will gain more expertise in the editing process. Students, in the latter part of the semester, will produce weekly programs for local and public access.
Prerequisites: COM* 240
Offered: Spring

**COM* 247: Television Writing**

3 Credits
(Formerly COMM 218)

Television Writing provides an overview of broadcast writing style. Students will develop skills in major areas such as news and feature writing, public affairs research and interviewing, and commercial script writing. In addition to the research/writing component students will have the opportunity to produce their work during in-studio newscasts and interviews and be involved in the production of a video commercial.

Prerequisites: COM* 166/ART* 185 or COM* 222.

Offered: Fall

**COM* 278: Group Communication**

3 Credits

Students will learn about the theory and process of small group communication. The course will examine the creation, development, and functions of small groups. Students will gain experience leading group discussions and analyzing patterns of communication in community-based small group settings.

Prerequisites: ENG* 101.

Offered: Fall, Spring

Fulfills General Education - Mode 3

**COM* 286: Computer Animation II**

3 Credits
(Formerly COMM 252)

This course is a continuation of COM* 186/DGA* 261 with an emphasis on multimedia design and interactivity. Students will work with Flash’s Actionscript to create interactive presentations. Advanced tips and tricks with this software are covered, as well as a discussion of design principles for multimedia development. Topics such as digital video and sound are also discussed. The class is limited to 24 students. Studio: 6 hours per week.

Prerequisites: COM* 186/DGA* 261 or permission of instructor

Offered: Spring

Cross listed as: DGA* 262

**COM* 295: Internship I**

3 Credits
(Formerly COMM 270)

This course provides students the opportunity to apply classroom theory in an actual work setting. Students may be placed in a variety of work settings as related to their program of study including TV, radio, and newspaper.

Prerequisites: Completed 12 credit hours in Media Associate program.

Offered: Fall, Spring, Summer

**COM* 296: Internship II**

3 Credits
(Formerly COMM 271)

This course provides students the opportunity to apply classroom theory in an actual work setting. Students may be placed in a variety of work settings as related to their program of study including TV, radio, and newspaper.

Prerequisites: Completed 12 credit hours in Media Associate program.

Offered: Fall, Spring, Summer
COM* 298: Independent Study in Advanced Video Filmmaking.
3 Credits
This course allows students who have taken Video/Filmmaking to pursue an advanced project with a faculty mentor. The student will develop the concept, write the script, and shoot and edit the final video project. Completed projects are generally in the 15-20 minute range.
Prerequisites: None
Offered: Fall, Spring

Computer Science

CSC* 101: Introduction to Computers
3 Credits
This transferable course is designed for the learner who wants to strengthen their current computer knowledge and become more proficient with technology. An overview of today's technologies, their importance and how they converge will be discussed. Students will gain an understanding of information literacy along with specific topics including the infrastructure of the Internet, web technologies, networking, digital media, computer programming, productivity software, and issues of personal responsibility as they relate to technology.
Prerequisites: Eligibility for MAT* 095 and ENG* 101.
Offered: Fall, Spring, Summer
Fulfills General Education - Knowledge of Human Experience & Behavior

CSC* 124: Programming Logic and Design with Python
3 Credits
This is an introductory course in structured programming concepts using Python and assumes no prior programming experience (in any language). Topics include data types, input/output from both the console and data files, arithmetic, comparison and logical operators, selection statements, looping, functions and arrays. This course assumes students are comfortable working with simple algebraic equations. Students should also have basic file and folder management skills on a personal computer.
Prerequisites: Eligibility for MAT* 172.
Offered: Fall, Spring

CSC* 125: Programming Logic and Design with C++
3 Credits
This is an introductory course in structured programming concepts using C++. Topics include data types, input/output from both the console and data files, arithmetic, comparison and logical operators, selection statements, looping, functions and arrays. This course assumes students are comfortable working with simple algebraic equations. Students should also have basic file and folder management skills on a personal computer.
Prerequisites: Eligibility for MAT* 172.
Offered: Fall, Spring

CSC* 205: Visual Basic .NET I
3 Credits
(Formerly CS 201)
This course will give the student practical experience with an object-oriented programming language. The emphasis will be on the use of the .NET classes in the building of the user interface and the corresponding code. Students will be exposed to object-oriented concepts working with the syntax and techniques of the Visual Basic .NET programming language.
Prerequisites: CSC* 124 or EGR* 230 or CSC* 125 or previous programming experience.
Offered: Occasionally
CSC* 206: Visual Basic .NET II
3 Credits
This course is a continuation of the Visual Basic .NET experience started in CSC* 205. It will emphasize object-oriented design and development concepts. Database work will be covered extensively. Web pages with ASP.NET code, class building, structured query language, and user controls will also be covered. Sequential files and Crystal Reports will be covered as time permits.
Prerequisites: CSC* 205.
Offered: Occasionally

CSC* 209: Advanced Access with Visual Basic
3 Credits
This course covers advanced concepts in Microsoft Access and uses Access VBA to extend the capabilities of the software. Access VBA is normally written to take advantage of a number of optional database object libraries. From oldest to newest, they include RDO, DAO, and ADO with helpers like ODBC thrown in for good measure. The Basics of Writing and Testing VBA Code includes Programming Applications Using Objects, Interacting with Data Using ADO and SQL, Building Interactive Forms, Importing, Linking, and Exporting Using External Data Sources, and Creating Reports and Web-Enabled Output.
Prerequisites: CSA* 145 and either (CSC* 124 or CSC* 125 or CSC* 205 or EGR* 230) or permission of the instructor.
Offered: Occasionally

CSC* 215: Object-Oriented Programming with C++
4 Credits
This course completes the introduction to programming in the C++ language. OOP concepts include objects and classes, instantiation, encapsulation, inheritance, polymorphism, overloading, pointers, and class libraries. Additional topics include structures, recursion, namespaces, multi-file programming, and random access files. This course assumes proficiency in C++ structured programming at the level of CSC* 125.
Prerequisites: CSC* 125 or EGR* 230
Offered: Fall, Spring

CSC* 226: Object-Oriented Programming with Java
4 Credits
This course will provide an introduction to Object-Oriented Programming with Java. Object-Oriented topics covered will include encapsulation, inheritance, interfaces and polymorphism. Students will gain experience reading and writing non-trivial, interactive programs that involve systems of cooperating objects. Features of Java including the Swing class, generics and static imports are covered. Students will also learn how to use Java to develop programs utilizing interactive graphics.
Prerequisites: CSC* 124 or CSC* 125 or EGR* 230
Offered: Occasionally

CSC* 230: Database Concepts with Web Application
3 Credits
This course provides a foundation in using database management systems. This includes framing user requirements and modeling the data using UML, implementing the model using the MySQL relational database management system, and using SQL statements to validate database efficacy. Alternative database systems considered are the hierarchical, networked, object-oriented, and XML.
Prerequisites: CSC* 125 or CSC* 124 or EGR* 230 or CSC* 205 or permission of the instructor
Offered: Fall, Spring
CSC* 241: Data Structures and Algorithms
4 Credits
This course will cover data structures and algorithms and present justifications for understanding and using them. Data structures such as linked lists, stacks, and queues will be covered. Algorithms including hash tables, trees and tree traversal, heaps and priority queues will be studied. An in-depth treatment of sorting, search and numerical methods will be covered prior to an analysis of compression and encryption techniques, and graph and geometric algorithms
Prerequisites: CSC* 215 or permission of instructor.
Offered: Spring

CSC* 247: Game Development in C++
3 Credits
This course will introduce the student to basic computer game design and game components such as sprites, backgrounds, 2D graphics and tiling. Different types of games including as multi-level and multi-player games will be explored. Students will add sound to the games and learn how to save game settings between sessions. The use of mathematics and artificial intelligence in game design and development will be introduced. This will be a project-based, hands-on class using the Allegro game library with the C++ programming language.
Prerequisites: CSC* 215
Offered: Occasionally

CSC* 286: Microprocessor Assembly language
4 Credits
(Formerly CS 215)
This course is an introduction to the programming and interfacing of a microprocessor. Topics include assembly language programming, bus architecture, the datapath, addressing methods, memory systems, interrupts, analog to digital and digital to analog conversion, use of a Multifunction Multiprocessor Support Controller, data acquisition and process control systems. The course includes a microprocessor laboratory component.
Prerequisites: CSC* 124 or CSC* 125 or EGR* 230 or permission of the instructor; Also recommend EET* 252
Offered: Spring
Cross listed as: EET* 256

CSC* 287: Organization and Architecture
3 Credits
This course is an introduction to the internal structure of the digital computer. Topics include: instruction sets, computer arithmetic, the datapath, pipelining, parallel processing, RISC (Reduced Instructions Set Computers), memory, addressing schemes, and embedded systems.
Prerequisites: EET* 252: Digital Electronics (may be taken concurrently) or permission of the instructor
Offered: Fall

CSC* 295: Cooperative Education/Work Experience
3 Credits
(Formerly CIS 270)
This course provides students the opportunity to apply classroom theory in an actual work setting. Students may be placed in a variety of work settings as related to their program of study. For students in the computer programs, this may include positions as system analysts, or staff specialists within a variety of settings.
Prerequisites: 15 completed credit hours in a computer program
Offered: Fall, Spring
Computer Systems Applications

CSA* 105: Introduction to Software Applications
3 Credits
This hands-on introductory course is designed for students to develop practical software application skills necessary for personal productivity at home, on the job, or in the classroom. Topics will include an overview of the Windows operating system, including file management skills, in addition to word processing, spreadsheet, database and presentation tools. On-line students must have access to a Windows-based PC along with Office 2010.
Prerequisites: Eligibility for ENG* 101
Offered: Fall, Winter, Spring, Summer

CSA* 135: Spreadsheet Applications
3 Credits
This course is designed for students who want to learn more about the power of spreadsheets and what they can do, or just update their software skills to the newest version of Excel. Students will be introduced to the features of Excel on every level from worksheets and workbooks, to formulas, functions, charts and databases. Students will also be introduced to the analytical features of spreadsheets which include macros and VBA in a "hands-on" teaching environment. This course begins to prepare students for the Microsoft Office Specialist (MOS): Microsoft Office Excel exam.
Prerequisites: CSA* 105 or BOT* 230 or CST* 201 or ACC* 125 or permission of instructor
Offered: Fall, Spring

CSA* 246: Introduction to Geographic Information Systems (GIS)
3 Credits
(Formerly CIS 246)
Students will learn the basic principles of Geographic Information Systems and explore and evaluate the various data models and structures used in the input management, analysis and output of geographic data. We will develop hands-on experience through use of a microcomputer based vector system (ArcView GIS), and examine how the nature and character of spatial data can be used in studies of natural and socio-economic environments.
Prerequisites: GEO* 101 or GEO* 111 and proficiency with the Windows operating system.
Offered: Spring
Cross listed as: GEO* 246

Computer Systems Technology

CST* 114: Web Essentials
3 Credits
(Formerly CST 114)
This course provides students of all disciplines with the skills needed to become proficient and informed users of the web. Students will learn how to navigate through current web technologies encompassing current internet tools, social media, their digital presence, investigative practices and online security risks and safeguards to apply to today's workplace or career disciplines.
Prerequisites: None
Offered: Fall, Spring

CST* 123: Computer Operating Systems
4 Credits
(Formerly CST 130)
This introductory course will provide the student with an understanding of modern operating systems and their
functions. The course will cover the structure and design of operating systems including resource allocation, process management, CPU management, problems in concurrency and synchronization of processes, deadlocks, primary and secondary storage management, file management, and system performance. The course is a blend of theory and laboratory work. The laboratory component will include an examination of DOS, Windows and Linux. The student will have an opportunity to install a minimum of two operating systems.

**Prerequisites:** CSC* 124 or CSC* 125 or CSC* 205 or CSC* 206 or CSC* 215 or CSC* 226 or CSC* 241 or CSC* 286 or CSC* 287 or EGR* 230

**Offered:** Fall, Spring

**CST* 131: Networking Theory & Application**

4 Credits

This course will provide an introduction to theoretical networking concepts as well as a hands-on exposure to applications of networking technology. Various basic topics on design, implementation, administration and troubleshooting of Local Area Networks (LANs) and Wide Area Networks (WANs) will be explored. The types of network components such as software, hardware, media, topologies, protocols and standards (OSI model) will be covered from a networking technician’s point of view. Students will develop critical thinking and troubleshooting skills through setting-up and administering a basic network. This course will begin to prepare students for the CompTIA Network+ certification exam.

**Prerequisites:** Eligibility for MAT* 138

**Offered:** Fall, Spring

**CST* 132: Networking Infrastructure**

3 Credits

*Formerly Replaces CST 172/formerly CST 272*

This course will cover advanced infrastructure concepts. Advanced topics in network design, network and routing protocols, security, and troubleshooting as they apply to switch and router configuration will be covered. Students will work with switches and routers in a hands-on setting. This course begins to prepare for the Cisco CCNA exams.

**Prerequisites:** CST* 237

**Offered:** Fall

**CST* 141: Computer Hardware**

4 Credits

*Formerly Replaces CST 191/formerly CST 141*

This course will cover the principles of maintaining and troubleshooting personal computer hardware. The course will cover computer hardware, associated peripherals, configuration, optimization, and repair from the perspective of a PC technician. Students will develop critical thinking and troubleshooting skills through an emphasis on hands-on experience in installing, maintaining, and processing various problems with computer hardware. This course begins to prepare students for the CompTIA A+ certification.

**Prerequisites:** Eligibility for ENG* 101 .

**Offered:** Fall, Spring

**CST* 150: Web Design & Development I**

3 Credits

This course is designed to deliver the fundamentals for designing and building web pages. The core technologies of the HTML5 markup language along with an introduction to Cascading Style Sheets (CSS), and web multimedia are introduced to help students build navigable web pages. Various stages of effective web page planning and analysis can also be expected. Basic computer experience, strong file management skills and some knowledge of HTML are helpful.
Prerequisites: Any CSC*, CSA*, or CST* course, or permission of instructor.
Offered: Fall, Spring, Summer

CST* 201: Introduction to MIS
3 Credits
This course provides the background necessary for understanding the role of information systems in organizations and for using computer tools and technology in solving business problems. Topics include organization and technical foundations of information systems, theory of design of information, database, and network systems, e-commerce and business intelligence, and information network security management. Microsoft Excel, Access and collaborative applications and other commonly used business applications are used to demonstrate selected topical concepts.
Prerequisites: Eligibility for ENG* 101.
Offered: Fall, Spring

CST* 205: Project Management
4 Credits
This course will help the student understand the role of project management, and how to manage client expectations, develop a list of key tasks, assign responsibilities, track progress and prepare progress updates. Additionally, the student will be introduced to PMBOK the Project Life Cycle Methodology process groups; initiating, planning, executing, monitoring and controlling, and closing. Project sponsorship, stakeholders, scope, time, cost, quality and risk management are topics examined during the course. A project management software tool is introduced and utilized within the scope of the class project. Each student, as part of a team, will be responsible for taking an assigned project through its entire life cycle. This course will begin to preparing the student for the Project Management Institute CAPM® Exam and for those with project management experience, the PMP® Exam.
Prerequisites: Successful completion with a B or higher in one of the following: BES* 218, BFN* 202, BMG* 202, CSC* 124, CSC* 125, CSC* 205, CSC* 215, CSC* 230, CST* 131, CST* 150, EGR* 230, or permission of the instructor.
Offered: Spring, Summer

CST* 237: SysAdmin I - Client/Server
4 Credits
This course introduces students to system administration concepts for Microsoft Windows Server and Workstation operating systems, emphasizing hands-on configuration and troubleshooting of multiple networked systems in a laboratory environment. Topics include OS deployment, OS virtualization, IP configuration, MMC, registry, RAID and disk management, user accounts, IIS, terminal services, print servers, system security and optimization, and third-party tools. This course begins to prepare the students for Microsoft OS certification exams.
Prerequisites: CST* 131
Offered: Spring

CST* 238: SysAdmin II - Client/Server
4 Credits
This course continues the study of Microsoft Windows Server and Workstation operating systems, emphasizing hands-on configuration and troubleshooting of multiple networked systems in a laboratory environment. Topics include DHCP, NetBIOS, WINS, DNS, Active Directory and Group Policy. This course begins to prepare students for Microsoft OS certification exams.
Prerequisites: CST* 237
Offered: Fall
**CST* 250: Web Design and Development II**

3 Credits

This course is for students who have a solid background in XHTML/HTML5 and CSS, and who want to learn more about the intricacies of creating dynamic websites using advanced stylesheet design concepts (CSS) and client-side programming with Javascript. Building and maintaining an interactive, commercial website on various browser platforms will be covered.

**Prerequisites:** CST* 150 and CSC* 124 or CSC* 125 or CSC* 205 or EGR* 230 or permission of instructor.

**Offered:** Fall

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**CST* 254: Web Page Design**

3 Credits

*(Formerly CST 245)*

Course will introduce students to the fundamentals of planning, designing, producing and posting web pages and sites for the Internet. The basics of HTML code, Photoshop image creation for the web and use of Dreamweaver are major topics. Emphasis will be on site design and management. Student projects will be reviewed in class. Class: 6 hours per week.

**Prerequisites:** DGA* 111, COM* 213 or permission of the instructor.

**Offered:** Fall, Spring

**Cross listed as:** DGA* 240

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**CST* 258: Internet Programming**

4 Credits

This course provides a foundation in using server-side web programming to provide dynamic content on the web. This includes how to install, configure, integrate, and utilize an Apache web server, a MySQL relational database management system, the PHP scripting language, and standards-based HTML web code to generate dynamic web pages. Emerging Web 2.0 techniques will be surveyed.

**Prerequisites:** CST* 150 and CSC* 230.

**Offered:** Spring

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**CST* 277: Network Security Implementation**

4 Credits

This course provides a practical foundation for students entering the computer security field. This course will focus on the skills a security professional requires, and will cover such topics as network address translation, packet filtering, firewalls, intrusion detection systems, security policies, and virtual private networks (VPNs). Students will gain knowledge of how attackers break into systems and networks, and how an intrusion detection system can play a key role in detecting and responding to these events. Students will develop critical thinking and troubleshooting skills though mastering these security concepts in a hands-on setting. This course begins to prepare students for security certification exams.

**Prerequisites:** CST* 238 and CST* 132

**Offered:** Spring

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**Criminal Justice**

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**CJS* 100: Perspectives of Criminal Justice**

3 Credits

This course is designed to provide academic skill development while focusing on topics specific to the criminal justice system. Students will explore learning styles, enhance their reading skills, and continue to develop college writing abilities through the study of various components of the criminal justice system.
Prerequisites: Currently eligible for or enrolled in ENG* 066, or by permission of the instructor.
Offered: Fall, Spring

CJS* 101: Introduction to Criminal Justice
3 Credits
This course is a survey of the history and philosophy of American justice concepts with the emphasis on present day practical application through the efforts of the law enforcement, court, and correction segments of the criminal justice system.
Prerequisites: Eligibility for ENG* 093.
Offered: Fall, Spring

CJS* 102: Introduction to Corrections
3 Credits
(Formerly CJ 114)
An introduction to the correctional system in the United States and other allied countries. Emphasis will be placed on the role of corrections in our society and criminal justice system as a whole.
Prerequisites: Eligibility for ENG* 093.
Offered: Fall, Spring

CJS* 103: Introduction to Security
3 Credits
This course is a review and study of the organizations that require security such as retail operations, medical institutions, educational institutions, financial operations, and others, and of the legal and economic aspects that must be considered in security operations.
Prerequisites: Eligibility for ENG* 093.
Offered: Occasionally

CJS* 104: Introduction to Security Methods
3 Credits
This course is a concise study of the procedures and operations that affect security and guarantee the rights of those involved in any security system.
Prerequisites: CJS* 103
Offered: Occasionally

CJS* 105: Introduction to Law Enforcement
3 Credits
This course examines the history of law enforcement, the work of police officers, and how police organizations operate. The topics of discretion, police sub culture, corruption and the use of force will also be examined. The course will look at law enforcement as a career with various local, state and federal law enforcement agencies.
Prerequisites: Eligibility for ENG* 093
Offered: Occasionally

CJS* 106: Introduction to Homeland Security
3 Credits
Students will come to understand the history of homeland security as it evolved from the fields of civil defense, emergency preparedness, and traditional intelligence studies. How to provide security against various hazards such as chemical, biological, and cyber attacks will also be covered. The principles and practices of emergency planning and management are emphasized in this course, and the instruction focuses on recent and ongoing efforts at government reorganization and restructuring.
Prerequisites: CJS* 101 and ENG* 093.

Offered: Occasionally

CJS* 120: Police and the Community
3 Credits
This course covers the study, analysis, and recommendations for reducing the severity of the major tension points between the police and the community. The student will learn the practical application of scientific knowledge and methodology to police-community relations in the State of Connecticut.
Prerequisites: Eligibility for ENG* 093.
Offered: Fall,Spring

CJS* 123: Police Patrol Procedures
3 Credits
(Formerly CI 112)
The history and growth of traffic problems and the development of specialized traffic control methods.
Prerequisites: CJS* 105.
Offered: Spring

CJS* 125: Motor Vehicle Stops
1 Credits
(Formerly CI 140)
The academic aspect of this course will provide an in-depth look and discussion of Connecticut motor vehicle laws. The practical aspect of the course will concentrate on suggested police procedures for the stopping and extrication of individuals from their vehicles. Several practicals will focus on the safe extrication of felony suspects as well as investigation of the suspected DWI offender.
Prerequisites: None
Offered: Occasionally

CJS* 126: Gangs and "Families"
1 Credits
(Formerly CI 141)
The course will provide the student with an overview of the psychology and sociology behind various gangs around the country. In depth coverage will be given to local gangs’ symbolism including their graffiti, styles, tattoo, patches and other markings. Additionally, this course will cover assorted proactive strategies for the police and the community in their attempt to control gang violence/crime.
Prerequisites: None
Offered: Occasionally

CJS* 127: Identifying and Coping with Domestic Violence and Child Abuse
1 Credits
This course presents a multidisciplinary approach to the study of intimate partner violence and child abuse. At the conclusion of this course, students will have a basic knowledge of the dynamics and consequences of child abuse and intimate partner violence and the community, social service, criminal justice, and current policy responses.
Prerequisites: None
Offered: Occasionally

CJS* 128: Survey of Drugs of Abuse
1 Credits
(Formerly CI 143)
The course will consist of an overview of drugs of abuse with regards to identification, effects on the body, mind and behavior. Class will include didactic presentation, video presentation discussion and interactive class presentations.

**Prerequisites:** None  
**Offered:** Occasionally

**CJS* 129: Management Preservation of the Crime Scene**  
1 Credits  
In this course students will gain a basic understanding and knowledge of crime scene investigation including the theory and history of crime scene investigation, responsibilities of a crime scene investigator, methods and techniques in the collection and preservation of evidence.  

**Prerequisites:** None  
**Offered:** Occasionally

**CJS* 130: Profiles of the Serial Offender**  
1 Credits  
*(Formerly CJ 151)*  
This course introduces the student to the fundamental principles of violence in American society, namely the nature, existence and causation of violent crime, and the problems and procedures involved in the investigation and apprehension of violent criminals.  

**Prerequisites:** None  
**Offered:** Occasionally

**CJS* 131: Traumatic Incident Stress Management**  
1 Credits  
*(Formerly CJ 152)*  
The focus of this seminar is the identification, origin and management of personal stress as it relates to public service fields. These sessions will draw upon the day-to-day life experiences and coping mechanisms of individuals working in law enforcement and other public service fields.  

**Prerequisites:** None  
**Offered:** Occasionally

**CJS* 132: Serial Sex Offenders**  
1 Credits  
*(Formerly CJ 153)*  
This course will provide an in-depth look at the psychology, sociology and characteristics of the habitual sex offender. In-depth coverage will be given to the modus operandi of these offenders as well as a discussion concerning the profile of individuals who become their victims.  

**Prerequisites:** None  
**Offered:** Occasionally

**CJS* 133: Police Response to Tactical/Hostile Situations**  
1 Credits  
This course will provide an overview of law enforcement’s role in response to a tactical/hostile situation. Areas covered will include initial response by patrol officers, function of tactical teams, hostage negotiators, and responsibilities of command personnel.  

**Prerequisites:** None  
**Offered:** Occasionally
CJS* 134: Advanced Studies in Gangs & Cults
1 Credits
(Formerly CJ 156)
The course will provide the student with an overview of the psychology and sociology behind various gangs around the country. In this advanced course the student will be exposed to West Coast gangs’ symbolism including their graffiti, styles, tattoo(s), patches and other markings. Additionally this course will cover assorted cult groups identified throughout the country and some of the proactive strategies police and family members use to extricate individuals caught up in cults.

Prerequisites: None
Offered: Occasionally

CJS* 135: The Death Penalty
1 Credits
(Formerly CJ 160)
This course will introduce students to the death penalty laws of the State of Connecticut, other states, and other countries. This will be accomplished through lecture, group discussion, reading material, video presentation and an expert guest lecturer. There will also be an in-depth discussion concerning present day death penalty cases.

Prerequisites: None
Offered: Occasionally

CJS* 136: Crime, Criminals and the Media
1 Credits
(Formerly CJ 161)
In this one credit course, the student will look at various aspects of the effect of the media in the criminal realm. This course will also explore the historical events that have led to the contemporary relationship that now exists between the police and the media.

Prerequisites: None
Offered: Occasionally

CJS* 137: Test Preparation for Police Candidates
1 Credits
(Formerly CJ 162)
The goals and objectives of this two-day program are to prepare the student to successfully pass the written and oral board phases of police testing. In addition the student will learn about orientation and the human resource component of law enforcement provisions.

Prerequisites: None
Offered: Occasionally

CJS* 138: Shooting Reconstruction
1 Credits
Reconstruction of shooting incidents is a critical investigative area for all law enforcement agencies. This course will cover topics such as gunshot residue and distance determination, scene investigation and the search of physical evidence, determination of bullet trajectory, bloodsplatter patterns, DRUGFIRE, and glass examination. Hands-on techniques will be emphasized.

Prerequisites: None
Offered: Occasionally

CJS* 144: Policing Techniques
1 Credits
(Formerly CJ 144)
This course will help to identify the social science, theoretical and historical roots of community policing and
will clarify the concept in both organizational and philosophical terms. Research relative to the successes and failures of community policing will be studied as well as various programs that fall under the community policing rubric.

**Prerequisites:** None

**Offered:** Occasionally

**CJS* 145: Interviewing and Interrogation**

1 Credits

*(Formerly CJ 157)*

This course will present the determination of when interviewing or interrogation should be used. The use of interviewing methods including the how, what and why of each will be discussed.

**Prerequisites:** None

**Offered:** Occasionally

**CJS* 157: Homeland Security and Domestic Preparedness**

1 Credits

This course is designed to provide the students with the understanding and background in the field of terrorism and homeland security. Students will identify different terror organizations both domestic and international and focus on prevention of future terrorist incidents.

**Prerequisites:** None

**Offered:** Occasionally

**CJS* 160: Introduction to Emergency Management**

3 Credits

This course is designed to provide the students with a comprehensive foundation on the background, components, and systems involved in the management of disasters and other emergencies that are handled by Emergency Managers, Police, Fire, and EMS.

**Prerequisites:** CJS* 101 or CJS* 105

**Offered:** Occasionally

**CJS* 171: Safety and Fire Protection Management**

3 Credits

*(Formerly CJ 131)*

The management of safety and fire prevention services and accident prevention programs will be covered.

**Prerequisites:** None

**Offered:** Occasionally

**CJS* 211: Criminal Law I**

3 Credits

A study of the act(s) and mental state(s) which make up the elements of a crime. The analysis of these criminal elements will allow exploration into a wide spectrum of criminal law including felonies and misdemeanors. This course will enable students to recognize and correctly classify criminal actions as they happen every day in our society.

**Prerequisites:** CJS* 101 or CJS* 105

**Offered:** Fall

**CJS* 212: Criminal Law II**

3 Credits

A study of the act(s) and mental state(s) which make up the elements of a crime. The analysis of these criminal elements will allow exploration into a wide spectrum of criminal law including felonies and misdemeanors.
This is not a course specifically addressing Connecticut laws, although they will be discussed in comparison with other state and federal court decisions.

**Prerequisites:** Successful completion of ENG* 101 with a C- or better and successful completion of CJS* 211 with a C- or better.

**Offered:** Spring

**CJS* 213: Evidence & Courtroom Procedure**
3 Credits
The study of the major rules of evidence and the steps necessary to compile a comprehensive and complete courtroom record. Emphasis will be placed on the hearsay rule, confessions, and evidence obtained though search and seizure.

**Prerequisites:** Successful completion of ENG* 101 with a grade of C- or better and successful completion of CJS* 101 or CJS* 105.

**Offered:** Spring

**CJS* 215: Trial Research and Presentation**
3 Credits
Provides in-depth involvement, academically as well as practically, in various aspects of courtroom experience. The rules of evidence are examined through the study of various legal problems. Ability to analyze facts and legal issues and to develop logical legal arguments is emphasized. Concentration is given to proper courtroom demeanor and advocacy skills.

**Prerequisites:** CJS* 211

**Offered:** Fall

**Cross listed as:** LGL*225

**CJS* 216: Advanced Trial Techniques**
3 Credits
Students in this advanced trial techniques and litigation class will further develop and perfect their skills in the presentation of a legal case in front of a courtroom (judge or jury). The student will learn to go beyond the basic aspects of the courtroom rules and procedures and will develop a theme of how a case should be presented differently at different times and in front of different audiences. This class is set forth to fine tune the litigation skills of the prospective law student in a legal debate atmosphere. Furthermore, this course will perfect the technique and ability of the student to research, analyze, and use legal case law and evidence to their fullest capacity in order to present the most effective and persuasive case possible in a court of law.

**Prerequisites:** CJS* 215

**Offered:** Spring

**CJS* 220: Criminal Investigation**
3 Credits
This course will address the basic aspects of criminal investigation; present an overview of crimes and their elements; identify the major goals of a criminal investigation; and, discuss various investigative techniques and the criminal investigator’s relationship with individuals and other agencies. Instruction topics include; conduct at crime scenes; collection and preservation of evidence; interviews and interrogations; crime scene photography; crime scene sketching; and report writing. Students will also participate in the investigation and analysis of a mock crime scene.

**Prerequisites:** CJS* 101 or CJS* 105

**Offered:** Fall
CJS* 221: Arson Investigation  
3 Credits  
This course covers a wide range of topics in various disciplines and professions related to fire investigation. The nature and behavior of fire, ignition sources, fire related deaths and arson investigation will be explored. Other investigative topics such as fire modeling, courtroom testimony and report writing will be included.  
Prerequisites: CJS* 220  
Offered: Occasionally

CJS* 222: Computer Investigation Techniques  
3 Credits  
This course will provide an overview of computer crime and law enforcement response. This course will discuss electronic evidence, the detection of computer crime, securing, seizing, and examining computer systems. Highly recommended that students have a working knowledge of computers.  
Prerequisites: None  
Offered: Occasionally

CJS* 225: Forensic Science I  
3 Credits  
This course involves the detailed discussion of types of physical evidence and the analytical processes that are utilized in a forensic science laboratory. In addition this course will enable students to study how forensic scientists along with law enforcement are able to obtain investigative leads in criminal cases. Some travel will be required.  
Prerequisites: CJS* 101 or CJS* 105  
Offered: Fall

CJS* 226: Forensic Science II  
3 Credits  
This course will be devoted to advanced topics within the area of forensic science. Students will discuss advanced methods of crime scene reconstruction and conduct hands on applications of scientific techniques available to law enforcement personnel and forensic scientists. Some travel will be required.  
Prerequisites: CJS* 101 or CJS* 105 and successful completion of CJS* 225 with a C- or better.  
Offered: Spring

CJS* 227: Forensic Photography  
3 Credits  
Focuses on the practical application of photography to problems of investigation, court identification, proof identification, and court exhibits. Explores scientific areas of photography as related to crime scene and evidence applications and examines new uses of computer image enhancement. Techniques of locating and identifying evidence also included.  
Prerequisites: CJS* 101 or permission of instructor.  
Offered: Occasionally

CJS* 230: Security Management  
3 Credits  
(Formerly CJ 133)  
The principles of organization, management, budgeting, personnel, records and public relations of a security agency will be covered.  
Prerequisites: CJS* 104  
Offered: Occasionally
CJS* 240: Correctional Administration  
3 Credits  
This course is an overview of the corrections field; courts, detention, sentencing, adult institutions, probation, parole, staffing and personnel issues. This course will be an active and interactive learning experience. Students will use the lecture and reading material to build a framework for understanding current sentencing and correctional practices.  
Prerequisites: CJS* 101 and successful completion of CJS* 102 with a C- or better.  
Offered: Occasionally

CJS* 243: Institutional Treatment of the Offender  
3 Credits  
This course will explore issues and policies in correctional counseling, counselor roles, work settings and challenges, offender classification and assessment, counseling processes, and therapeutic techniques. Emphasis will be on the placement, treatment, community release and successful reintegration of the offender. Students will learn how to successfully respond to an offender by taking their crimes and experiences into account, but also by looking at how the offenders view themselves.  
Prerequisites: CJS* 101  
Offered: Occasionally

CJS* 244: Community-Based Corrections  
3 Credits  
(Formerly CJ 202)  
This course introduces students to historical, theoretical and judicial processes in the development of community correctional programs, with emphasis on juvenile delinquency programs at the police and judicial level (probation, parole, drug, alcohol and self-help programs).  
Prerequisites: CJS* 102  
Offered: Occasionally

CJS* 250: Police Organization and Administration  
3 Credits  
This course introduces the student to the various aspects of police administration that include, but are not limited to, administrative functions, human resources, public relations, manager-subordinate relations, community interactions, and the theories that reflect management strategies.  
Prerequisites: CJS* 101 or CJS* 105  
Offered: Spring

CJS* 255: Ethical Issues In Criminal Justice  
3 Credits  
This course is designed to provide students with an understanding of the necessity of high standards of ethical and moral behavior in our justice process. Comprehensive coverage is achieved through focus on law enforcement, legal practice, sentencing, corrections, research, crime control policy and philosophical issues.  
Prerequisites: Eligibility for ENG* 093  
Offered: Occasionally

CJS* 272: Social Psychology of Criminal Behavior  
3 Credits  
This course will focus on an understanding of the variation of the occurrence of criminal acts and, in particular, an understanding of individual difference in criminal activity and victimology. Topics for exploration include; the demographics of crimes (nationally), theories behind the perpetrators and various theories that may assist in
profiling of offenders and their victims (these theories include the biological, psychological, and sociological perspective of what constitutes crime and the criminals).

**Prerequisites:** PSY* 111 or SOC* 101 and CJS* 101  
**Offered:** Occasionally  
**Cross listed as:** PSY* 217

### CJS* 289: Careers in Criminal Justice
3 Credits  
This course is designed to provide students with an understanding of the physical, intellectual and psychological demands associated with obtaining and performing a law enforcement position. Students will learn how to achieve the levels of physical fitness necessary to acquire and perform a law enforcement position. Students will also be instructed in the written and oral skills necessary to obtain and function as a law enforcement officer. Students will participate in mock physical, written and oral exams. Students will also be introduced to the concepts of polygraph testing in use by law enforcement agencies. Students will also be instructed in the methods used by law enforcement personnel for self defense and officer safety.

**Prerequisites:** CJS* 101 or CJS* 105 (or concurrently taking CJS* 101 or CJS* 105)  
**Offered:** Fall, Spring

### CJS* 293: CJ Cooperative Education/Work Experience
3 Credits  
This course is an academic program that assists students with placement into work experiences that are related to criminal justice. Under the supervision of the college and the employer students work 150 hours in unpaid placements or 300 hours in paid placements to combine virtual classroom learning with work experience. In addition to the work placement, students are required to participate and complete all requirements of the virtual online classroom.

**Prerequisites:** CJS* 101 and the consent of the program coordinator.  
**Offered:** Occasionally

### CJS* 294: Contemporary Issues in Criminal Justice
3 Credits  
Contemporary Issues in Criminal Justice is a dynamic course meant to help students think about alternative policing methods. There will be an emphasis on non-traditional practices, organizational methods and policies. Students will examine how to make police systems more effective and how to improve service to communities in a rapidly changing society.

**Prerequisites:** None  
**Offered:** Occasionally

## Deaf Studies

### DFS* 111: Introduction to the Deaf Community
3 Credits  
*(Formerly DS 111)*  
This introductory course examines various aspects of the deaf community. It addresses culture, controversies, activities and events in the deaf community. In addition, the course explores the hearing mechanism, hearing disorders and the role of audiological assessment in the deaf community.

**Prerequisites:** None  
**Offered:** Fall, Spring
Dental Assistant

DAS* 123: Chairside Dental Assisting
4 Credits
This course provides instruction on development of the student as a dental health care professional as well as basic theory related to general and specialty dental procedures. Students will learn the principles of four-handed dentistry and, during lab, develop chairside assisting skills.
Prerequisites: Acceptance into the Dental Assistant Program
Offered: Fall

DAS* 131: Oral Anatomy and Pathophysiology
3 Credits
This course combines basic oral anatomy with oral pathology. Students will learn the basic anatomy of the oral cavity and the bones of head and face. Additionally, students will be introduced to oral pathology including developmental anomalies and pathological lesions.
Prerequisites: Acceptance into the Dental Assistant Program
Offered: Fall

DAS* 132: Dental Materials
4 Credits
This course will provide students with the knowledge and skills necessary to safely manipulate dental materials in the clinical and laboratory settings. Skills necessary for the manipulation of dental materials will be developed during lab sessions.
Prerequisites: DAS* 123, DAS* 131, and DAS* 136 all with a "C" or better
Offered: Spring

DAS* 133: Dental Radiography
4 Credits
This course will prepare students for the Dental Assisting National Board Radiation Health and Safety Exam through exposure to the topics of radiation production, hazards and safety, radiation control factors, exposure and processing techniques, exposure and processing errors, and extraoral radiographs. All exposure skills will be developed to the level of clinical competency during lab sessions.
Prerequisites: DAS* 123, DAS* 131, and DAS* 136 with a "C" or better
Offered: Spring

DAS* 134: Oral Health Promotion
1 Credits
This course will provide students with the theory of preventive dentistry including preventive procedures, oral hygiene instruction, and nutrition as it relates to oral health.
Prerequisites: DAS* 123, DAS* 131, and DAS* 136 with a "C" or better
Offered: Spring

DAS* 135: Dental Practice Management
1 Credits
This course will introduce students to dental office front desk duties such as scheduling appointments, answering the telephone, accounts receivable/payable, processing dental insurance claims, records management and inventory control.
Prerequisites: DAS* 132, DAS* 133, and DAS* 134 all with a "C" or better
Offered: Summer
DAS* 136: Infection Control in Dentistry

This course will familiarize students with their role as a preventer of disease transmission in the clinical setting. Theory will involve diseases of concern in dentistry, modes of disease transmission, and prevention of disease transmission through personal protection, disinfection and sterilization. Focus will be on standards/guidelines as established by OSHA, CDC, and the ADA. Application of infection control skills will take place during labs for Chairside Dental Assisting, Dental Materials, and Dental Radiography.

Prerequisites: Acceptance into the Dental Assistant Program
Offered: Fall

DAS* 200: Dental Assistant Clinical Practicum

3 Credits
This clinical practicum allows the students to apply and improve upon the dental assisting skills learned in Chairside Dental Assisting, Dental Materials, and Dental Radiography.

Prerequisites: DAS* 132, DAS* 133, and DAS* 134 all with a "C" or better
Offered: Summer

Digital Arts

DGA* 109: Introduction to Computer Games

3 Credits
An introduction to designing and producing games that examines the history of games, game theory in general, the use of various technologies to create games and an analysis of the use of games and simulations in recreation, learning and commerce. The course will allow students to put the theory into practice through the use of “middleware” programs that permit students to develop games without an extensive background in programming. Class: 6 hours per week.

Prerequisites: None
Offered: Spring
Fulfills General Education - Mode 1

DGA* 111: Introduction to Computer Graphics

3 Credits
(Formerly FA 210)
An introduction to creating images using the computer. Students will learn basic imaging skills through the use of several software programs. Previous drawing or design experience is helpful and no prior computer skills are required.

Prerequisites: None
Offered: Fall, Spring
Fulfills General Education - Mode 1

DGA* 212: Advanced Computer Graphics

3 Credits
(Formerly FA 211)
This course is a continuation of computer imaging skills developed in DGA* 111 but with an emphasis on creating and executing design projects on the computer. The course includes instruction in advanced software such as Adobe Illustrator and Adobe Photoshop as well as such topics as image scanning, memory management and color outputting. Studio: 6 hours per week. (Advanced Computer Graphics may be taken up to three times for credit.)

Prerequisites: DGA* 111 or COM* 213 or permission of instructor.
Offered: Fall, Spring
DGA* 214: Advanced Computer Graphics II
3 Credits
(Formerly FA 212)
This course is a continuation of computer imaging skills developed in DGA* 111 but with an emphasis on creating and executing design projects on the computer. The course includes instruction in advanced software such as Adobe Illustrator and Adobe Photoshop as well as such topics as image scanning, memory management and color outputting. Studio: 6 hours per week. (Advanced Computer Graphics may be taken up to three times for credit.)
Prerequisites: DGA* 111 or COM* 213 or permission of instructor.
Offered: Fall, Spring

DGA* 216: Advanced Computer Graphics III
3 Credits
(Formerly FA 213)
This course is a continuation of computer imaging skills developed in DGA* 111 but with an emphasis on creating and executing design projects on the computer. The course includes instruction in advanced software such as Adobe Illustrator and Adobe Photoshop as well as such topics as image scanning, memory management and color outputting. Studio: 6 hours per week. (Advanced Computer Graphics may be taken up to three times for credit.)
Prerequisites: DGA* 111 or COM* 213 or permission of instructor.
Offered: Fall, Spring

DGA* 224: Digital Painting
3 Credits
This course will focus on the use of digital imaging software to create rich, complex compositions and original imagery. Topics will include color theory, shading and light, essentials of two-dimensional design, familiarity with “painterly” styles and techniques, creation of custom brush shapes, and output formats. The course will use specific software to develop artistic, representational skills for creating imagery for use in illustration, environments and objects for computer games, and other forms of artistic expression. Studio course: 6 hours per week.
Prerequisites: DGA* 111: Introduction to Computer Graphics or permission of instructor.
Offered: Fall

DGA* 240: Web Page Design
3 Credits
(Formerly MM 245)
Course will introduce students to the fundamentals of planning, designing, producing and posting web pages and sites for the Internet. The basics of HTML code, Photoshop image creation for the web and use of Dreamweaver are major topics. Emphasis will be on site design and management. Student projects will be reviewed in class. Class: 6 hours per week.
Prerequisites: DGA* 111, COM* 213 or permission of the instructor.
Offered: Fall, Spring
Cross listed as: CST* 254

DGA* 244: Advanced Web Design
3 Credits
A continuation of DGA* 240 that explores the creative and technical design processes behind dynamics web page construction. Topics covered will include advanced CSS (Cascading Style Sheets) practices, additional
web programming options such as JavaScript, audio and video components, development of Flash web content. Students will develop web pages and websites that move beyond HTML site construction. Class: 6 hours per week.

**Prerequisites:** DGA* 240 or permission of instructor.

**Offered:** Spring

**DGA* 261: Computer Animation**

3 Credits  
(Formerly FA 251)

Students will learn how to use the computer to create animated presentations. The course will cover basic animation techniques as they apply to the digital environment as well as traditional skills such as storyboarding and script preparation. The software used will be Adobe Flash. The class is limited to 24 students. Studio: 6 hours per week.

**Prerequisites:** DGA* 111, DGA* 212 or COM* 213 or permission of instructor.

**Offered:** Fall, Spring

**Cross listed as:** COM* 186

**DGA* 262: Computer Animation II**

3 Credits  
(Formerly FA 252)

This course is a continuation of COM* 186/DGA* 261 with an emphasis on multimedia design and interactivity. Students will work with Flash’s Actionscript to create interactive presentations. Advanced tips and tricks with this software are covered, as well as a discussion of design principles for multimedia development. Topics such as digital video and sound are also discussed. The class is limited to 24 students. Studio: 6 hours per week.

**Prerequisites:** COM* 186/DGA* 261 or permission of instructor

**Offered:** Fall, Spring

**Cross listed as:** COM* 286

**DGA* 265: Character Animation**

3 Credits

This course will continue the animation instruction that began in DGA 261 with a focus on creating and animating characters. Using Adobe Flash as the primary animation tool students will concentrate on the study and analysis of animated characters, the graphic design of character development, drawing techniques for character representation, character motion based on human and animal locomotion, lip-synching for character dialogue, and storytelling and narrative development. This course will focus on two-dimensional character animation. Studio course: 6 hours per week.

**Prerequisites:** DGA* 261: Computer Animation or permission of instructor.

**Offered:** Fall

**DGA* 271: 3-D Computer Modeling I**

3 Credits  
(Formerly MM 201)

Students will learn to design and create in digital 3D space, changing flat art and images into shapes with solid volume. The course will cover basic 3D topics such as wireframe assembly, extruding and lathing, various approaches and techniques of lighting and shading, image and texture mapping and development of animation in the 3D space. Use and integration of 3D forms and animations with other multimedia software will also be covered. Class: 6 hours per week.

**Prerequisites:** DGA* 111 or DGA* 212 or COM* 213 or permission of the instructor.

**Offered:** Fall
DGA* 274: Game Design with Flash
3 Credits
This course will lead students to both the conceptual design of games and simulations as well as the essential computer programming that makes these things function. The course will focus on the use of the animation application Flash. Flash has a very robust programming language called ActionScript which has been used to create dynamic content for websites and interactive CD-ROMs. In recent years Flash’s programming potential has been used to create games (both drive-based and online), education simulations and interactive content for new cell phone technologies. It’s presence and popularity within the multimedia world make it an ideal tool for this application. Class: 6 hours per week.
Prerequisites: DGA* 261/COM* 186 or permission of instructor.
Offered: Fall

DGA* 275: Game Level Design
3 Credits
This course is a comprehensive introduction to the design of multi-level games. Topics will include general game theory, analysis of existing games, development of game narratives and storytelling, modes of game distribution, and level design. The focus of the course is the development of increasingly complex games through the creation of levels of varying gameplay. The course will employ a “game engine” for project work that will allow students to concentrate on design issues with a minimal amount of programming experience. Studio Course: 6 hours per week.
Prerequisites: DGA* 109: Introduction to Computer Games or permission of instructor.
Offered: Fall

DGA* 276: 3D Animation and Rigging
3 Credits
This course is a continuation of DGA 271 3D Computer Modeling I with a focus on animation within a threedimensional virtual environment. Essential 3D animation techniques will be included as well as fundamental techniques of model rigging for animated deformation. Topics will include animating surface textures and lights, 3D character development and animation, rigging with bone structures, particle system animation, special effects creation, and post-production compositing with video software. Studio course: 6 hours per week.
Prerequisites: DGA* 271: 3-D Computer Modeling I or permission of instructor.
Offered: Spring

DGA* 287: Digital Short Films
3 Credits
This course allows students to continue their training in computer-based video editing. Students will develop short movies of their own design and learn to take a video project from the planning stages, through video shooting, to digitization and editing. Basic story structure, theme, plot, character development and more advanced techniques of writing treatments and scripts will be taught. Sound and lighting workshops will also be included. This course is a required course of the Multimedia Studies program. Class: 6 hours per week.
Prerequisites: COM* 166 or permission of the instructor.
Offered: Fall, Spring
Drug/Alcohol Recovery Counselor

DAR* 101: Public Health Issues Abuse and Addiction
3 Credits
This course is designed to introduce students to various topics and issues important to understanding addictions. These topics include: history of legislation and regulation, the brain and its relationship to addictions, self help and evidence-based approaches to recovery, the client-counselor relationship, levels of treatment approaches, current medication assisted therapies, assessment and treatment approaches, current medication assisted therapies, assessment and treatment planning, the continuum of care, family systems as they relate to addictions, cultural considerations, ethics and confidentiality, public health issues such as prevention, HIV/AIDS and other related diseases, and co-occurring (substance use & mental health) disorders. The student will also be introduced to the eight performance domains of an addiction counselor. Class: 3 hours per week.
Prerequisites: Eligibility for ENG* 066. DARC majors must pass this course with a C- or better.
Offered: Fall, Spring and Summer

DAR* 102: Taking Sides: Drugs and Society
3 Credits
Many times in our media, in our communities and in our lives we are confronted with issues regarding alcohol and drug use and abuse. For instance, should marijuana be decriminalized or legalized? The purpose of this course is to introduce you to a number of contemporary topics such as the one mentioned, in order to illustrate how we view these issues and some of the controversies they produce. Because of complex human affairs, there are no easy answers to many of the dilemmas we may examine. When confronted by differing opinions and points of view, it is necessary to develop the ability to comprehend, evaluate and make decisions in the face of uncertainty. The use of basic critical thinking skills and educational research will be incorporated in this course to better understand these differences.
Offered: Occasionally

DAR* 105: Hollywood, Addiction and Mental Illness
3 Credits
This course will review movies, both past and present, that involve substance abuse, addiction, mental health, and treatment. We will discuss and analyze how Hollywood has depicted these themes over the last 50 years and examine how it has impacted society’s view of addiction and mental health. The course is also designed to introduce you to the artistic, cultural and historical dimensions of these types of films. You will be required to view films, read material that explores the nature and impact of the film medium and write analytically about the style and content. Some films may carry ‘R’ ratings, primarily for strong language, violence and nudity.
Offered: Fall

DAR* 111: Addiction Counseling
3 Credits
(Formerly DARC 111)
Provides an overview of the major historical counseling theories such as Psychoanalytic, Adlerian, Person Centered and Gestalt as well as more current and evidenced-based theories such as CBT, MET, Solution Focused and Brief therapies as they pertain to addiction counseling. This course will also examine various recovery theories/methods such as 12 step and medication assisted therapies. Students will be introduced to various counselor/counseling skill and techniques through classroom experience and explore culturally sensitive issues in the client/counselor relationship. Issues pertaining to substance use and mental health disorders (co-occurring disorders) will also be examined. Addiction counselor codes of ethics will also be reviewed.
Prerequisites: Eligibility for ENG* 101. DARC majors must pass this course with a "C" or better.
Offered: Fall, Spring
DAR* 112: Group Counseling Theory and Techniques
3 Credits
This course will introduce the student to the concepts and theories of group counseling and will present an overview of the different modalities of group counseling, from psychoeducational groups to process groups. This course will also explore the use of group counseling as an effective modality for treating addictions and the implications for use in a multicultural environment. Students will have an opportunity to examine their own performance as a group leader and a group member through experiential groups. Ethics and confidentiality, as it pertains to groups, will be addressed. This course combines didactic and experiential learning situations.
Prerequisites: Eligibility for ENG* 101. DARC majors must pass this course with a "C" or better.
Offered: Fall, Spring

DAR* 158: Biology of Addiction
3 Credits
Students will study the pharmacodynamics and pharmacokinetics of drugs and alcohol on various systems in the body including the brain. Students will get an understanding of the classification of drugs and will examine the short and long term consequences of alcohol and/or drug use, abuse and dependence on the brain and body. Students will also be introduced to the central nervous system and the process of neurotransmission and its role in addiction.
Prerequisites: Eligibility for ENG* 101. DARC majors must pass this course with a "C" or better.
Offered: Fall, Spring

DAR* 213: Addiction Counseling II
3 Credits
This course builds on the fundamental theories of counseling learned in DAR* 111 and shows the relationship between theory and skills. This course will also examine the DSM and will discuss and explore co-occurring disorders. Students will develop their roles as entry level counselors and define the qualities, knowledge, and skills essential to become a competent, ethical, and culturally aware counselor and will research and develop a comprehensive clinical evaluation and treatment plan.
Prerequisites: DAR* 111 and eligibility for ENG* 101. DARC majors must pass this course with a "C" or better.
Offered: Fall, Spring

DAR* 251: Counseling Internship I
6 Credits
This course provides students with the experience of spending 15 hours per week in a substance abuse treatment facility under the joint supervision of the DARC Program and an appropriately credentialed supervisor at the facility. Students will observe the treatment process from intake to discharge. Students will observe, practice, and develop increased competence, they will progress from active observers to co-counselors, and then to counselors. To enhance the field experience, students will also attend a weekly seminar/group supervision on campus. Students will be expected to reflect on their fieldwork, participate in clinical supervision as well as group interaction.
Prerequisites: DAR* 101, DAR* 111, DAR* 112, DAR* 158 and DAR* 213 with a grade of C or better and eligibility for ENG* 101. It is also recommended that students complete their other General Education course requirements prior to entering the internship. (This internship has a selective admission component and if accepted/approved for the internship the student will begin in the fall semester. Also note that this internship continues in DAR* 252 in the spring semester.)
Offered: Fall
DAR* 252: Counseling Internship II
6 Credits
This course is a continuation of DAR* 251 and again the student will spend a minimum of 15 hours per week at their site and attend a classroom seminar once a week. It is expected that students will have counselor responsibilities at their sites and will be running groups and be assigned one or more clients. In the classroom the students will prepare and write a case for presentation. Class: 2 hours per week plus 15 hours per week at their field placement site.
Prerequisites: DAR* 251 with a grade of “C” or better and eligibility for ENG* 101.
Offered: Spring

Early Childhood Education

ECE* 101: Introduction to Early Childhood Education
3 Credits
(Formerly ED 111)
This course is designed to acquaint students with the profession of early childhood education. Foundations of early childhood education, the content of the curriculum and significant aspects of child growth and development will be discussed.
Prerequisites: Eligibility for ENG* 101.
Offered: Fall, Spring

ECE* 103: Creative Experiences/Children
3 Credits
(Formerly ED 212)
This course examines the role of music, movement, art, language and literacy, dramatic play, blocks, table toys, sand and water in the curriculum. The relationship of creative experiences to the total educational program of the young child is explored. Students create and present developmentally appropriate activities.
Prerequisites: None
Offered: Fall, Spring

ECE* 109: Science & Math for Children
3 Credits
(Formerly ED 237)
This course will focus on the teacher’s role in supporting and expanding young children’s interests in math, science, nature and the environment. Students will share and explore ideas, materials and activities both indoors and outdoors. Topics will include the importance of sand and water play, fostering observation skills and encouraging trial and error experiences. Identifying quality math and science literature for young children will also be addressed.
Prerequisites: ECE* 101.
Offered: Fall, Spring

ECE* 131: Children’s Literature
3 Credits
(Formerly ED 118/ENG 118)
This course offers an overview of children’s literature including its history, genres, and leading authors and illustrators. The selection and critical study of books for children, including folklore, poetry, fiction and nonfiction will be addressed. Issues related to children’s literature and literature extension activities will also be explored.
Prerequisites: ENG* 101.
ECE* 176: Nutrition, Health and Safety for Young Children
3 Credits
The relationship between health, safety and nutrition and child development will be examined. Emphasis will be on the strategies needed to implement a safe, healthy and nutritionally sound program. Community agencies and resources that benefit children and families will be explored.
Prerequisites: None
Offered: Fall, Spring

ECE* 214: Observation Assessment and Participant Seminar
4 Credits
(Formerly ED 117)
This course will focus on the role of the learning environment and teacher/child interaction in the early childhood program. Students will visit programs and use observation forms to assess the quality of the early childhood experience for the young child. Six 4-hour observation visits are required. Class: 3 hours per week and the required program visits.
Prerequisites: ECE* 101.
Offered: Fall, Spring

ECE* 222: Methods and Techniques in Early Childhood Education
3 Credits
(Formerly ED 211)
This course studies the role of the teacher as she/he plans, implements, and evaluates a curriculum that focuses on the design of the learning environment; the interaction between teacher, child, and family; and the development of activities that foster children’s social, emotional, physical, and intellectual development.
Prerequisites: None
Offered: Fall, Spring

ECE* 224: Advanced Early Childhood Curriculum
3 Credits
(Formerly ED 217)
This course focuses on the teaching strategies necessary to design and implement a high quality early childhood program and will address topics of previous curriculum courses in greater depth. Study topics will include observation and planning for individual and groups of children, working with families, and ethics.
Prerequisites: ECE* 101.
Offered: Spring

ECE* 231: Early Language and Literacy Development
3 Credits
(Formerly ED 123)
This course is an introduction to the language and literacy development of children from birth through age eight. It explores ways that adults can promote growth in the areas of reading, writing, listening and speaking.
Prerequisites: Eligibility for ENG* 101.
Offered: Fall, Spring

ECE* 241: Methods and Techniques for Infants and Toddlers
3 Credits
This course is a study of the growth and development of infants and toddlers across all domains. Specific
attention will be placed on the critical importance of purposeful learning environments, language development, communication and supporting infants’ and toddlers’ social and emotional development. There will be discussion and exploration of significant research to support our understanding of the importance of healthy development. We will also explore the importance of establishing warm, responsive, nurturing relationships with young children.

**Prerequisites:** None

**Offered:** Fall

**ECE* 290: Student Teaching I**

3 Credits  
(*Formerly ED 200*)

The student participates in 300 hours of training in an early childhood education program where he/she assumes responsibilities appropriate to his/her skills, knowledge and experience.

**Prerequisites:** Interview with CDA Coordinator and/or permission of instructor.

**Offered:** Spring

**ECE* 291: Student Teaching II**

3 Credits  
(*Formerly ED 200*)

The student participates in 300 hours of training in an early childhood education program where he/she assumes responsibilities appropriate to his/her skills, knowledge and experience.

**Prerequisites:** Interview with CDA Coordinator and/or permission of instructor.

**Offered:** Fall

**ECE* 295: Student Teaching Practicum**

6 Credits  
(*Formerly ED 295*)

The student participates in 225 hours of training in a NAEYC accredited early childhood education program. The student will assume responsibilities appropriate to his/her skills, knowledge and experience. Attendance is required at seminars as well as completion of the 225 hour practicum requirement.

**Prerequisites:** 40 hours of approved course work and permission of instructor.

**Offered:** Fall, Spring

**ENG* 114: Children’s Literature**

3 Credits  
(*Formerly ENG 118*)

This course offers an overview of children’s literature including its history, genres, and leading authors and illustrators. The selection and critical study of books for children, including folklore, poetry, fiction and nonfiction will be addressed. Issues related to children’s literature and literature extension activities will also be explored.

**Prerequisites:** ENG* 101.

**Offered:** Fall, Spring, Summer

**Cross listed as:** ECE* 131

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**Earth Science**

**EAS* 102: Earth Science**

3 Credits  
(*Formerly ERSC 110*)

This course is an introductory survey of selected topics in geology, oceanography, astronomy, and meteorology. Earthquakes, space probes, sea explorations, plate tectonics, volcanoes, climate change and severe weather are
among the topics treated in depth.

**Prerequisites:** Eligibility for ENG* 101.

**Offered:** Fall, Spring, Summer

**Fulfills General Education - Mode 5**

**Fulfills General Education - Knowledge of Physical & Natural World**

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**EAS* 106: Natural Disasters**

3 Credits

This course provides an introduction to the causes, occurrence and consequences of natural disasters. Students will analyze the physical causes as well as the distribution and frequency of disasters such as earthquakes, volcanoes, hurricanes, floods and extraterrestrial impacts. Case studies will include local and regional examples of historical and recent disasters. The course will focus on naturally-occurring disasters, but will also consider the role of human activities in both contributing to and mitigating natural disasters.

**Prerequisites:** Eligibility for ENG* 101.

**Offered:** Fall, Spring

**Fulfills General Education - Mode 5**

**Fulfills General Education - Knowledge of Physical & Natural World**

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**Economics**

**ECN* 101: Principles of Macroeconomics**

3 Credits

*(Formerly ECON 101)*

This course covers determinants of the level of national economic activity, employment and prices, fiscal and monetary policies, international economics, and payment mechanisms.

**Prerequisites:** Eligibility for ENG* 101.

**Offered:** Fall, Spring

**Fulfills General Education - Mode 6**

**Fulfills General Education - Knowledge of Human Expressions & Behavior**

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**ECN* 102: Principles of Microeconomics**

3 Credits

*(Formerly ECON 102)*

Demand and supply, principles of the market mechanisms, pricing and output determination under competitive and noncompetitive market behavior, factor productivity, prices and international economics will be taught.

**Prerequisites:** Eligibility for ENG* 101.

**Offered:** Fall, Spring, Summer

**Fulfills General Education - Mode 6**

**Fulfills General Education - Knowledge of Human Expressions & Behavior**

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**Education**

**EDU* 102: Educational Paraprofessional**

3 Credits

*(Formerly EDU 101)*

This course addresses the knowledge and skill base needed by the effective educational paraprofessional. Topics studied include roles and responsibilities, relevant laws, confidentiality and ethics, effective collaboration and problem solving, and supporting students in the classroom. This course is appropriate for preservice and veteran educational paraprofessionals alike.

**Prerequisites:** None

**Offered:** Occasionally
EDU* 104: Pathways to Education  
1 Credits  
This course is an introduction to the road to becoming a teacher, including professional responsibilities and certification requirements for various levels of educators. Federal and state requirements, including those contained in the No Child Left Behind Act, will be discussed. It will also include a discussion of ethical responsibilities. Preparation for the Praxis 1 is included in this course.  
Prerequisites: None  
Offered: Fall, Spring  

EDU* 110: Teaching in the Twenty-First Century  
3 Credits  
This course is designed for students considering education as a major and teaching as a profession. Students will have an opportunity to experience primary, middle and secondary education through field placements. Students will obtain a systematic body of knowledge from which they can develop a repertoire of teaching practices to meet the learning needs of students with diverse learning styles, developmental needs, cultural and socioeconomic backgrounds.  
Prerequisites: ENG* 101 eligibility, MAT* 138 eligibility.  
Offered: Occasionally  

Electrical Engineering Technology  

EET* 108: AC/DC Circuit Analysis  
4 Credits  
(Formerly ELT 120)  
An introductory course in DC and AC circuit fundamentals with emphasis on circuit analysis, measurements, and test equipment operation. Topics include: DC/AC circuit principles, circuit analysis laws and theorems, components, test equipment fundamentals, circuit simulation software, and other related topics. Upon completion of the course, students will be able to interpret circuit schematics, design, construct, verify, and analyze DC/AC circuits and use electrical test equipment. Class: 3 hours per week. Laboratory: 2 hours per week.  
Prerequisites: Co-requisite MAT* 185 or MAT* 186.  
Offered: Fall, Spring  

EET* 118: Electrical Power Systems  
3 Credits  
(Formerly ELT 113)  
This course covers the basic principles and major components used in energy conversion systems. Topics include: DC motor/generators, AC motor generators, AC squirrel cage induction motors and transformers and their control systems.  
Prerequisites: PHY* 122, EET* 108.  
Offered: Occasionally  

EET* 132: Electronics  
4 Credits  
(Formerly ELT 122)  
The course includes semiconductor -based devices such as diodes, bipolar transistors, FET’s, thyristors, and related electronic components. Emphasis is placed on analysis, selection, biasing, and applications in power supplies, small signal amplifiers, and switching and control circuits. Upon completion of the course, students will be able to construct, analyze, verify, and troubleshoot discrete component circuits using appropriate techniques and test equipment. Class: 3 hours per week. Laboratory: 2 hours per week.
Prerequisites: EET* 108.
Offered: Occasionally

EET* 252: Digital Electronics
4 Credits
(Formerly ELT 220)
This course covers combinational and sequential logic circuits. Topics include: number systems, Boolean algebra, logic families, MSI and LSI circuits, AC/DC converters, and other related topics. Upon completion of the course, students will be able to construct, verify, and troubleshoot digital circuits using appropriate techniques and test equipment. Class: 3 hours per week. Laboratory: 2 hours per week.
Prerequisites: CSC* 125, MAT* 185 or MAT* 186.
Offered: Fall

EET* 268: Control Systems
4 Credits
(Formerly ELT 213)
This course introduces students to electronic controls systems. Topics include: complex algebra, phasors, impedance, transfer functions, open and closed loop systems and sequential control including pneumatic and relay logic. Students will study pneumatic control elements, ladder diagrams, interfacing techniques, stepper motor controls and servo motor controls, the use of microcomputer controls in industrial applications such as robotics, application of data conversion electronics and the applications of program controllers. Class: 3 hours per week. Laboratory: 2 hours per week.
Prerequisites: EET* 108, MAT* 254 (formerly MAT* 250).
Offered: Occasionally

PHO* 101: Introduction To Photonics
4 Credits
This course explores optics as a science underlying many new “photonics” technologies such as laser manufacturing, arthroscopic surgery, CD and DVD technology, and fiber optic telecommunications. The course will focus on the nature, production, and behavior of light and cover common optical devices such as lenses and prisms. Throughout the course, we will emphasize optics application in medicine, communications, manufacturing and nature. The lab that accompanies this course will illustrate and reinforce concepts by duplicating the classic experiments in optics and photonics. Class: 3 hours per week. Laboratory: 2 hours per week.
Prerequisites: Permission of instructor.
Offered: Occasionally

Engineering Science (General)

EGR* 101: Engineering Experience
3 Credits
(Formerly ENGR 110)
This course is designed for students that think they may have an interest in science, engineering and technology. It will cover design and safety principles, illustrate why you can drive your car across a bridge, explain how a hair dryer really works, why airplanes fly and a curve ball curves. Students will be exposed to a wide range of engineering problems and solutions and the best part is mathematics will not be needed.
Prerequisites: None
Offered: Fall, Spring
EGR* 111: Introduction to Engineering
3 Credits
(Formerly ENGR 111)
Students will be introduced to the fields of engineering through design and graphics and comprehensive engineering projects. Topics include: sketching, charts, graphs, forces, energy, electrical circuits, mechanisms, robotics, manufacturing technologies, and fundamentals of engineering economics.
Prerequisites: MAT* 138 or MAT* 139 or satisfactory score in the mathematics assessment test.
Offered: Fall, Spring, Summer

EGR* 112: Engineering Drawing Interpretations
3 Credits
(Formerly ENGR 101)
An introduction to the interpretation of engineering drawings beginning with the basics of orthographic projection. Topics include: working drawings, lines, linear and angular dimensioning, sectional views, tolerances and allowances, thread representation, arrowless and tabular dimensioning, steel specifications, auxiliary views, point-to-point and datum dimensioning conforming to ANSI Y14.5M and ISO standards.
Prerequisites: None
Offered: Fall, Spring

EGR* 117: Mechanics
4 Credits
(Formerly ENGR 121)
A basic course in the fundamentals of classical mechanics. Topics include: vectors, kinematics, translational and rotational equilibrium, torque, Newton’s laws of motion, gravitation, work, power, energy, impulse, momentum, rotary motion and elasticity. Class: 3 hours per week. Laboratory: 2 hours per week.
Prerequisites: MAT* 186
Offered: Occasionally

EGR* 211: Engineering Statics
3 Credits
(Formerly ENGR 211)
Prerequisites: MAT* 256 (which may be taken concurrently) and EGR* 111.
Offered: Fall, Spring

EGR* 212: Engineering Dynamics
3 Credits
(Formerly ENGR 212)
Engineering applications of Newtonian mechanics to dynamic forces, translational motion, work, impulse and momentum will be taught. Topics included: kinematics, kinetics of particles and rigid bodies, vibrations, energy and momentum conservation.
Prerequisites: EGR* 211 and MAT* 256.
Offered: Fall, Spring

EGR* 214: Engineering Thermodynamics
3 Credits
This course covers energy concepts and balances; basic definitions including the first and second laws of thermodynamics; ideal and real gases; thermodynamic properties; and introductory cycle analysis.
Prerequisites: PHY* 221 and MAT* 254 (formerly MAT* 250) or MAT* 186 grade C or better, or permission of instructor.
Offered: Fall, Spring
EGR* 221: Introduction to Electric Circuit Analysis
4 Credits
(Formerly ENGR 221)
Linear electric circuit analysis using Ohm’s and Kirchhoff’s laws: includes loop and nodal analysis; transients in electric circuits; behavior of operational amplifiers and nonlinear devices; design, operation and use of electric instruments; basic meter movements; and simple filter circuits. TI-85 graphing calculator required.
Class: 3 hours per week. Laboratory: 2 hours per week.
Prerequisites: PHY* 222 and MAT* 256. Co-requisite: MAT* 285.
Offered: Fall, Spring

EGR* 230: C++ For Engineers
3 Credits
This course approaches the C++ programming language using structured and object-oriented programming methods to examine and solve a variety of engineering problems. The course will include the use of abstract data types in solving classical engineering problems.
Prerequisites: MAT* 138 or MAT* 139, or permission of instructor.
Offered: Fall, Spring, Summer

EGR* 240: Current Topics in Sustainable Engineering
1 Credits
This course will include review and discussion of a wide range of current topics related to sustainable energy and engineering including new technologies, regulations, legal issues, employment opportunities, professional organizations and certifications, global issues and ethics. Case studies will be used to evaluate integration of sustainable energy technologies into residential and commercial facilities. The financial impact of implementation of a sustainable engineering project will also be discussed.
Prerequisites: None
Offered: Occasionally

EGR* 241: Sustainable Electrical Systems
4 Credits
This course integrates theory and laboratory work to investigate the fundamentals of electrical circuitry, and the design and function of the residential electrical energy distribution system. The principles of performance and efficiency of lighting systems and common appliances are presented, along with strategies for improving household electrical energy efficiency. Students will investigate how electricity is produced and transmitted, with a focus on alternative energy sources.
Prerequisites: EVS* 130, EVS* 131, and MAT* 138 or MAT* 139, (may be taken concurrently) or permission of instructor.
Offered: Occasionally

EGR* 242: Sustainable Building Systems
4 Credits
This course integrates theory and laboratory work to investigate the fundamentals of sustainable energy in commercial and residential settings. The performance and efficiency of the Building Shell, Air Flow, Insulation, Heating, Air Conditioning, Doors and Windows and Hot Water Systems will be studied along with strategies for improving energy efficiency. Health and Safety issues will be also be addressed.
Prerequisites: EVS* 130, EVS* 131, and MAT* 138 or MAT* 139, (may be taken concurrently) or permission of instructor.
Offered: Occasionally
English

ENG* 003: Foundations of Reading
0 Credits
This course is designed for students who need a semester of reading and study skills experiences necessary for college level work and before continuing on to English 066. This course will engage students in reading, writing, listening, and speaking activities with an emphasis on vocabulary, comprehension, and whole class and small group discussion. Placement into this course is via the assessment test. A grade of C or better is required for students to take ENG* 066.
Prerequisites: Placement into this course is via the assessment test.
Offered: Fall, Spring

ENG* 064: Foundations for College English
0 Credits
This course is designed for students who have demonstrated the ability to read and write with a basic level of competence, but who are not ready to read and write on a college level. The course focuses on reading and writing as processes, and is designed to lead students to producing college-level work. Students will interact with various types of texts through reading, writing, listening, and speaking. They will have the opportunity to create meaningful pieces of writing for real purposes and real audiences. As a result of this course, students will form a set of personal strategies for reading and writing. Note: A grade of “C” or better in ENG* 064 is required to take ENG* 093.
Prerequisites: ENG* 003 with a grade of “C” or better, or placement via assessment test.
Offered: Fall, Spring

ENG* 066: Foundation for College Study/Reading/Writing
0 Credits
(Formerly ENG 097)
This course focuses on reading and writing as processes. Students will interact with various types of texts through reading, writing, listening, and speaking. They will have the opportunity to create meaningful pieces for real purposes and real audiences. This course will prepare students to understand, interpret, and respond to course content at the college level. As a result of this course, students will form a set of personal strategies for reading and writing. Note: A grade of “C” or better in ENG* 066 is required to take ENG* 093. Class: 6 hours per week.
Prerequisites: ENG* 003 or ENG* 043 with a grade of “C” or better, or placement via assessment test.
Offered: Fall, Spring

ENG* 093: Introduction to College Reading and Writing
0 Credits
(Formerly ENG 098)
This course is designed for students who need to develop further their capabilities in language use—reading, writing, thinking, and speaking—to prepare them for the kinds of assignments they will be asked to complete in ENG* 101 and beyond. Students will read, discuss, think, and write about a number of topics. Note: A grade of “C” or better in ENG* 093 is required to take ENG* 101
Prerequisites: ENG 096 (pre-fall 2003) or ENG* 066 (fall 2003 and after) with a grade of “C” or better, or placement via assessment test.
Offered: Fall, Spring, Summer
**ENG* 101: Composition**

3 Credits  
*Formerly ENG 111*

This course is designed to introduce students to “the language of the academy” — that is, to the complex literacies of reading, writing, thinking, and speaking required of college students regardless of their area of specialization. ENG* 101 also introduces students to the specific requirements and standards of academic writing, including essay format, voice, and organizational strategies. Note: A grade of “C” or better in ENG* 101 is required to take ENG* 110 or ENG* 200.

**Prerequisites:** ENG* 093 with a grade of “C” or better, or placement via assessment test.

**Offered:** Fall, Spring, Summer

**Fulfills General Education - Mode 2**

**ENG* 101H: Honors Composition**

3 Credits  
*Formerly ENG 111H*

The honors section of ENG* 101, while meeting the requirements of the standard course, provides an opportunity for highly motivated students who welcome an increased level of challenge. The instructor’s expectations for student motivation and preparedness for class discussion and completion of assignments are significant. Students will read a number of demanding texts typically focused on a single, semester-long question.

**Prerequisites:** There is no formal prerequisite for the Honors section of ENG* 101. Students who are eligible for ENG* 101 and who welcome an increased level of challenge should sign up for the Honors section.

**Offered:** Fall

**ENG* 104: Reading Dynamics and Study Skills**

3 Credits  
*Formerly ENG 103*

This course enhances reading and study skills on an individualized and group basis. The course includes the following areas: reading comprehension, note taking, memory training, time management, outlining procedures, library skills, study skills, and strategies for taking essay and objective examinations.

**Prerequisites:** Eligibility for ENG* 093.

**Offered:** Occasionally

**ENG* 110: Introduction to Literature**

3 Credits  
*Formerly ENG 120*

This course is an introduction to the thematic and formal elements of literatures of diverse cultures, with an emphasis on fiction, poetry, drama, and the essay, with the aim of developing interpretive reading and writing skills.

**Prerequisites:** ENG* 101 with a grade of “C” or better.

**Offered:** Fall, Spring, Summer

**Fulfills General Education - Mode 3**

**Fulfills General Education - Knowledge of Human Thought & Expression**

**ENG* 110H: Honors Introduction to Literature**

3 Credits

The honors section of ENG* 110, while meeting the requirements of the standard course, provides an opportunity for highly motivated students who welcome an increased level of challenge. The instructor’s expectations for student motivation and preparedness for class discussion and completion of assignments are significant. Students will read a number of texts focused on a single, semester-long question.

**Prerequisites:** Successful completion of ENG* 101 with a grade of “C” or better, plus 12 semester hours with a
cumulative GPA of 3.4 OR a grade of B+ or higher in ENG* 101.

**Offered:** Occasionally

**ENG* 190: Basic Study Skills**

1 Credits  
*(Formerly ENG 100)*

This course is designed for and required of all students enrolled in the Adults in Transition program. Taken just before their first semester, this course introduces students to fundamental study skills. It presents these skills as processes and shows how they relate to and reinforce one another. Class: 15 hours. Open only to students in the Adults in Transition Program.  
**Prerequisites:** Open only to students in the Adults in Transition Program.  
**Offered:** Fall, Spring

**ENG* 200: Advanced Composition**

3 Credits  
*(Formerly ENG 112)*

This course is designed to develop and refine the advanced skills learned in ENG* 101 that are essential for both academic and professional writing. Emphasis will be on research and writing from data (outside sources). The main areas covered will be exposition, argumentation, and the research paper.  
**Prerequisites:** ENG* 101 with a grade of “C” or better.  
**Offered:** Fall, Spring, Summer  
**Fulfills General Education - Mode 3**

**ENG* 202: Technical Writing**

3 Credits  
*(Formerly ENG 114)*

This course focuses on the researching, writing, and editing of documents commonly found in the fields of science, technology, and business. Major topics covered include memo reports, instructions, proposals, progress reports, abstracts, document design, and documentation styles for technical reports.  
**Prerequisites:** ENG* 101 with a grade of “C” or better.  
**Offered:** Fall, Spring

**ENG* 203: Grammar, Usage and Style**

3 Credits  
*(Formerly ENG 203)*

This course reviews the standards and conventions of written English. It is an advanced course designed to hone communication skills, including editing and proofreading documents.  
**Prerequisites:** Eligibility for ENG* 101 or permission of the instructor  
**Offered:** Spring  
**Cross listed as:** BOT* 139

**ENG* 214: Drama**

3 Credits  

Literary survey of drama from Ancient Greece to the present including discussion of theatrical terms, stagecraft and classic critical statements. Students will study different dramatic genres like comedy and tragedy, and will approach plays in their historical context.  
**Prerequisites:** None  
**Offered:** Fall, Spring
ENG* 221: American Literature I
3 Credits
(Formerly ENG 245)
This course examines writings from the era spanning the arrival of Columbus to the Civil War. Topics covered include Native American tales and oratories, slave folklore, and both the popular and “classic” works of writers from the Puritan period, the eighteenth century, and the American Renaissance.
Prerequisites: ENG* 110 or permission of the instructor.
Offered: Fall

ENG* 222: American Literature II
3 Credits
(Formerly ENG 246)
This course examines major American writers from the late 19th century to the present day, with a focus on their contributions to the rapid and unique changes in style, form, and content that mark the literary tradition of 20th century America
Prerequisites: ENG* 110 or permission of the instructor.
Offered: Spring

ENG* 232: British Literature II
3 Credits
(Formerly ENG 202)
This course examines representative figures and concerns in British literature from 1799 to the Modern Period.
Prerequisites: ENG* 110 or permission of the instructor.
Offered: Occasionally

ENG* 245: Early Western Literature
3 Credits
(Formerly ENG 251)
This course introduces students to Western World literature from the Classical age to the Renaissance. Students will read works by authors such as Homer, Sophocles, the Biblical writers, Virgil, St. Augustine, Chaucer, Dante, and Shakespeare. Students will examine narrative and poetic strategies and discuss such lasting issues as the nature of good and evil, love and war, heroism and cowardice, salvation and damnation.
Prerequisites: ENG* 110 or permission of the instructor.
Offered: Fall

ENG* 246: Modern Western Literature
3 Credits
(Formerly ENG 252)
This course introduces students to Western literature from the Age of Reason through the Modern Period and (for purposes of comparison) to a variety of so-called “non-canonical” texts from writers who until very recently were not studied in college classrooms. Students will examine the poetic and narrative strategies of writers from a variety of classes and cultures.
Prerequisites: ENG* 110 or permission of the instructor.
Offered: Fall, Spring

ENG* 250: Studies in Ethnic Literature
3 Credits
This course surveys writing by authors of various ethnicities and races in American culture, including but not limited to Native Americans, European immigrants, African Americans, Hispanic Americans, and Asian Americans. This course examines how ethnic writing enables and resists assimilation, and how the literature of individual ethnicities underlies mainstream American literature and, at times, becomes part of the
mainstream. The course also explores the history and sociology of immigration and multiculturalism.

**Prerequisites:** ENG* 110 or permission of instructor.

**Offered:** Spring

**ENG* 251: African American Literature**

3 Credits

This course considers a wide range of literature, examining slave narratives, novels, short stories, plays, poetry, essays, and lyrics. Students will explore aspects of the African American experience from its origin in folklore through contemporary cultural expressions such as rap and hip hop.

**Prerequisites:** ENG* 110 or permission of instructor

**Offered:** Spring

**ENG* 262: Women in Literature**

3 Credits

(Formerly ENG 271)

This course explores the nature, roles, relationships, and feelings of women as expressed by women writers in various literary genres (essays, short stories, personal reflections, poems, plays and novels). Students will read the works of women writers of the 17th, 18th, 19th, and 20th centuries who share their ideas and understanding of what it is to be human and, particularly, to be female.

**Prerequisites:** ENG* 110 or permission of the instructor.

**Offered:** Fall

**ENG* 263: Women in Poetry**

3 Credits

(Formerly ENG 220)

This course is a seminar on the lives and work of women poets from 1950 to the present. Students will read, discuss, and analyze poems and explore how they reflect the life and times of the author. Students will demonstrate their understanding of poetry through weekly writing assignments and a longer research paper.

**Prerequisites:** ENG* 101 or permission of the instructor.

**Offered:** Spring

**Fulfills General Education - Mode 3**

**ENG* 271: Film and Literature**

3 Credits

(Formerly ENG 140)

This course explores what happens when classic (and not-so-classic) works of fiction and drama are brought to the screen. In studying specific literature-to-film adaptations, students examine the elements of both media (metaphor, narration, symbol, shot, sound, editing) and debate what differences, if any, exist between so-called serious art and entertainment.

**Prerequisites:** ENG* 101 with a grade of “C” or better.

**Offered:** Fall, Spring

**ENG* 282: Creative Writing: Poetry**

3 Credits

(Formerly ENG 222)

This course is a workshop in which students write and polish poems and study the poems of published writers and fellow students.

**Prerequisites:** ENG* 101 or permission of the instructor.

**Offered:** Spring

**Fulfills General Education - Mode 3**
ENG* 283: Creative Writing: Fiction
3 Credits
(Formerly ENG 221)
This course is a workshop experience in which students write a polished story (or stories) and study the short stories of published writers and fellow students.
Prerequisites: ENG* 101 or permission of the instructor.
Offered: Fall
Fulfills General Education - Mode 3

ENG* 294: English Practicum
3 Credits
(Formerly ENG 294)
This course is designed to offer motivated students a practicum experience in the college English classroom based on the assumption that “the best way to learn a subject is to teach it.” There are four Practicum options for students: Writing Practicum; Literature Practicum; Tutoring Practicum; Research Practicum. Class: 3 semester hours, to be arranged.
Prerequisites: Students will need the permission of the instructor of record to register. To be eligible, students should have completed 24 credits at MCC, should have completed ENG* 101 and either ENG* 110 or ENG* 200, and should have a GPA of at least 3.0. Interested students should submit one letter of recommendation from an MCC faculty member, a 250-word application essay detailing why they are interested in pursuing this Practicum, and a writing sample (which must be a paper they have submitted for a class at MCC) to the instructor of record who is chairing the selection committee. The deadline for submission of application portfolios is two weeks before the start of each semester. Contact professor of note for more information.
Offered: Fall, Spring

English as a Second Language

ESL* 163: ESL Structure I
4 Credits
(Formerly ENG 106)
ESL* 163 is a content-based grammar course for the high beginning ESL student. Listening, speaking, reading, and writing skills integrated with interactive grammar will provide the focus for this course.
Prerequisites: Placement via assessment test.
Offered: Fall, Spring

ESL* 164: ESL Structure II
4 Credits
(Formerly ENG 107)
ESL* 164 is a content-based grammar for the intermediate ESL student. Students will practice grammatical patterns as well as pronunciation, stress, and intonation. Sentence writing skills will supplement readings and journal writing.
Prerequisites: “C” or better in ESL* 163 or appropriate assessment test score or permission of instructor. ESL* 164 may be taken concurrently with ESL* 165; however, permission of the instructor is required.
Offered: Fall, Spring

ESL* 165: ESL Writing & Reading I
4 Credits
(Formerly ENG 116)
ESL* 165 is a content-based reading and writing for the high intermediate ESL student. Intensive writing of paragraphs will correspond to reading selections that model various paragraph styles.
Prerequisites: “C” or better in ESL* 164 or appropriate assessment test score or permission of instructor. ESL* 165 may be taken concurrently with ESL* 164; however, permission of the instructor is required.
Offered: Fall, Spring  
Fulfills General Education - Mode 3

ESL* 166: ESL Writing & Reading II
4 Credits  
(Formerly ENG 117)
ESL* 166 is an advanced writing and reading course that emphasized essay development and writing, critical response to readings, and reading comprehension skills.  
Prerequisites: “C” or better in ESL* 165 or appropriate assessment test score or permission of the instructor.

Offered: Fall, Spring  
Fulfills General Education - Mode 3

Environmental Science

EVS* 100: Introduction to Environmental Science
3 Credits  
(Formerly EVSC 100)
An introduction to the problems of physical resources management and aspects of ecological concern in our natural environment, with emphasis on our demand for energy, the consumption of our natural resources, resource pollution, climate changes, land use planning, and waste management. Alternate sources of energy are explored.  
Prerequisites: Eligibility for ENG* 101.

Offered: Fall, Spring, Summer  
Fulfills General Education - Mode 5  
Fulfills General Education - Knowledge of Physical & Natural World

EVS* 130: Sustainable Energy and the Environment
3 Credits
An introduction to the study of energy for electrical power generation and transportation, including sustainable and non-sustainable energy sources. This course investigates the relationship between population and consequences of increased energy demand, reliance on fossil fuels, global warming and other impacts. Work in this class includes an examination of energy types including fossil fuels and nuclear power, as well as sustainable and renewable energy sources such as wind, solar, hydropower, geothermal, biofuels, fuel cells, and others. Electrical conservation and efficiency will be investigated. The social, economic and environmental impacts and effectiveness of these alternatives will be evaluated.  
Prerequisites: MAT* 095 or placement by mathematics assessment test.

Offered: Fall, Spring, Summer  
Fulfills General Education - Mode 5

EVS* 131: Sustainable Energy for Your Community
3 Credits
An investigation of sustainable energy for residences and businesses through the use of energy conservation and renewable energy options. LEED Building standards and certification will be investigated. Energy options including hydroelectric, wind power, biofuels, passive solar, solar thermal, photovoltaics, hydrogen fuel cells and others will be studied. Energy conservation and efficiency in the use of window, insulation, electrical equipment, lighting, heating and cooling will be investigated. Research and evaluation of renewable energy’s economic and social feasibilities, environmental benefits and impacts, as well as state and national energy policies, will be addressed. Cost-benefit analyses will be completed for the implementation of various systems.  
Prerequisites: MAT* 095 or placement by mathematics assessment test.

Offered: Fall, Spring, Summer  
Fulfills General Education - Mode 5
French

FRE* 111: Elementary French I
4 Credits
(Formerly FREN 101)
An introduction to spoken and written French and Francophone culture. Emphasis is on communication through development of skills in conversation, reading and writing based upon the principles of French grammar and pronunciation. No previous knowledge of French is required.
Prerequisites: None
Offered: Fall
Fulfills General Education - Mode 3

FRE* 112: Elementary French II
4 Credits
(Formerly FREN 102)
French 112 is the second half of Elementary French. The course includes practice in conversation, reading and writing, and the study of French grammar and Francophone culture as an aid to communication.
Prerequisites: FRE* 111 or one year of high school French, or permission of instructor.
Offered: Spring
Fulfills General Education - Mode 3

FRE* 211: Intermediate French I
4 Credits
(Formerly FREN 201)
An intermediate level study of the principles of French grammar and basic vocabulary as a means of developing skills of conversation, reading and writing. The course includes the study of Francophone culture. Students may choose the honors option for this course.
Prerequisites: FRE* 111 and FRE* 112, FRE* 108, or two years of high school French; and eligibility for ENG* 101, or permission of instructor.
Offered: Fall
Fulfills General Education - Mode 3
Fulfills General Education - Knowledge of Human Thought & Expression

FRE* 212: Intermediate French II
4 Credits
(Formerly FREN 202)
This course is the second half of Intermediate French. The course will work to continue to develop skills in listening, speaking, reading and writing, including reading from selections on Francophone culture. Students may choose the honors option for this course.
Prerequisites: FRE* 211: Intermediate French I or three years of high school French, and eligibility for ENG* 101, or permission of instructor.
Offered: Spring
Fulfills General Education - Mode 3
Fulfills General Education - Knowledge of Human Thought & Expression

Geography

GEO* 101: Introduction to Geography
3 Credits
(Formerly GEOG 101)
This course introduces some of the many topics geographers examine to explain the relationship between
people and place. Topics include the physical earth, i.e. how mountains and lakes form, cultural patterns such as how languages in neighboring countries are related, population analysis, like human migration trends, and economic analysis including growth and decline of regions. Geographic factors that underlie current political, social and economic problems will also be explored.

**Prerequisites:** Eligibility for ENG* 101.

**Offered:** Fall, Spring, Summer

**Fulfills General Education - Mode 6**

**Fulfills General Education - Knowledge of Human Expressions & Behavior**

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### GEO* 111: World Regional Geography

3 Credits

*(Formerly GEOG 111)*

This course provides the student with a survey of the lands, peoples, and places in the world’s major cultural regions. Students explore the interaction between the physical environment and cultural, political and economic conditions in regions such as Asia, Africa, Middle and South America and Europe. This course provides a background for understanding world events.

**Prerequisites:** Eligibility for ENG* 101.

**Offered:** Fall, Spring, Summer

**Fulfills General Education - Mode 6**

**Fulfills General Education - Knowledge of Human Expressions & Behavior**

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### GEO* 201: Urban Geography

3 Credits

*(Formerly GEOG 201)*

Introduction to the history, nature and function of urban settlements will be considered. Particular stress on those problems pertinent to the dynamics of the central city and surrounding suburbs will be examined using census data, aerial photos, satellite imagery and GIS (Geographic Information Systems). Study of the development patterns and associated problems within the state will be included.

**Prerequisites:** Eligibility for ENG* 101.

**Offered:** Spring

**Fulfills General Education - Mode 6**

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### GEO* 203: This Fragile Planet: Toward an Environmentally Responsible World

3 Credits

This course introduces the student to the global environmental dilemma facing the world today. Its aim is to enhance awareness and understanding of the state of our natural environment, the rise of environmental consciousness in this country and abroad, and some of the major initiatives underway to secure a path toward a sustainable accommodation and development of the world’s growing population. This course draws upon the disciplines of geography, history, political science, and economics, stressing their interrelatedness when dealing with ecological issues. Alternative pathways to remedial action will be discussed, and important policy documents analyzed. Case studies of environmental action will be introduced.

**Prerequisites:** Eligibility for ENG* 101.

**Offered:** Fall

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### GEO* 204: Geography and Tourism Development

3 Credits

The course introduces the tourism field, enumerates the goals of the profession and provides a guideline for building individual and collective successes within it. Need/want satisfiers and motivators associated with travel, intrinsic and extrinsic influences of the buying process, geography, travel modes, accommodations, support industries, resorts, tourism planning, regulation, development, and marketing will be covered. The comprehensive view outline in this course brings to the forefront the immense proportions of world tourism
Prerequisites: Eligibility for ENG* 101.
Offered: Spring

GEO* 246: Introduction to Geographic Information Systems (GIS)
3 Credits
(Formerly GEOG 246)
Students will learn the basic principles of Geographic Information Systems and explore and evaluate the various data models and structures used in the input management, analysis and output of geographic data. We will develop hands-on experience through use of a microcomputer based vector system (ArcView GIS), and examine how the nature and character of spatial data can be used in studies of natural and socio-economic environments.
Prerequisites: Eligibility for ENG* 101.
Offered: Spring
Cross listed as: CSA* 246

Geology

GLG* 121: Introduction to Physical Geology
4 Credits
(Formerly GEOL 110)
An introduction to the composition and structure of the Earth’s crust, and the study of land forms and dynamic geological processes. Topics include minerals, rocks, fossils, glaciers and climate change, earthquakes, volcanoes, plate tectonics and mountain building. Students will investigate the geologic history of Connecticut. Field trips will be included as a component of the laboratory. Class: 3 hours per week. Laboratory: 3 hours per week.
Prerequisites: Eligibility for ENG* 101.
Offered: Fall, Spring
Fulfills General Education - Mode 5
Fulfills General Education - Knowledge of Physical & Natural World

Gerontology

GERN 161: Aging America: Issues and Dilemmas
3 Credits
This course will introduce a multidisciplinary approach to the study of aging. Students will learn how to separate the facts from the stereotypes about aging and to examine basic sociological, psychological and physiological factors that affect the aging process.
Prerequisites: None
Offered: Spring

Graphic Design

GRA* 151: Graphic Design I
3 Credits
(Formerly FA 205)
An introduction to communication design and basic studio skills with an emphasis on developing the ability to convert creative concepts into a visual medium. The course covers design layout, typography, the development of graphic identity, portfolio development and mechanical preparation. Studio: 6 hours per week.
Prerequisites: None
Offered: Fall, Spring
Fulfills General Education - Mode 1
GRA* 221: Illustration I
3 Credits
(Formerly FA 201)
A studio course designed to develop fundamental graphic rendering skills. The course explores a variety of materials and media through the creation of images. The emphasis is on the translation of concepts into visuals. Studio: 6 hours per week.
Prerequisites: None
Offered: Fall, Spring
Fulfills General Education - Mode 1

GRA* 222: Illustration II
3 Credits
(Formerly FA 202)
These studio courses expand the skills and techniques of translating concepts into visual form that were learned in GRA* 221, with a greater emphasis on project development and professional presentation. Studio: 6 hours per week.
Prerequisites: GRA* 221.
Offered: Fall, Spring

GRA* 223: Illustration III
3 Credits
(Formerly FA 203)
These studio courses expand the skills and techniques of translating concepts into visual form that were learned in GRA* 221, with a greater emphasis on project development and professional presentation. Studio: 6 hours per week.
Prerequisites: GRA* 221.
Offered: Fall, Spring

GRA* 224: Illustration IV
3 Credits
(Formerly FA 204)
These studio courses expand the skills and techniques of translating concepts into visual form that were learned in GRA* 221, with a greater emphasis on project development and professional presentation. Studio: 6 hours per week.
Prerequisites: GRA* 221.
Offered: Fall, Spring

GRA* 252: Graphic Design II
3 Credits
(Formerly FA 206)
Subsequent semesters of graphic design build on fundamentals covered in GRA* 151 but place a greater emphasis on professional design presentation through the development of more complex projects. Studio: 6 hours per week.
Prerequisites: GRA* 151.
Offered: Fall, Spring

GRA* 253: Graphic Design III
3 Credits
(Formerly FA 207)
Subsequent semesters of graphic design build on fundamentals covered in GRA* 151 but place a greater emphasis on professional design presentation through the development of more complex projects. Studio: 6
hours per week.
**Prerequisites:** GRA* 151.
**Offered:** Fall, Spring

**GRA* 254: Graphic Design IV**

3 Credits  
*(Formerly FA 208)*

Subsequent semesters of graphic design build on fundamentals covered in GRA* 151 but place a greater emphasis on professional design presentation through the development of more complex projects. Studio: 6 hours per week.

**Prerequisites:** GRA* 151.
**Offered:** Fall, Spring

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**Health**

**HLT* 090: Allied Health Study Skills**

0 Credits  
*(Formerly AH 090)*

A pass/fail study skills course for students planning to enroll, or who are currently enrolled, in an allied health program. Learn how to effectively study using various learning strategies. Required prior to beginning Allied Health Program courses. Exception granted for those who have a grade point average of 3.2 or better, or have taken ENG* 104 or equivalent study skills course. Class: 15 hours.

**Prerequisites:** None
**Offered:** Fall

**HLT* 103: Investigations in Health Careers**

3 Credits

This course is designed to assist students in meeting the expectations of a health care curriculum and career. The students will become familiar with the rigors of higher education and the specific skills needed to maximize their opportunity for academic and clinical success. The course will include a comprehensive overview of the duties and responsibilities associated with clinical competency. Interdisciplinary learning strategies, correlating clinical and didactic education, life management skills, work ethics, and critical thinking skills necessary for all health providers will be emphasized.

**Prerequisites:** Eligibility for ENG* 101, or placement by assessment test.
**Offered:** Spring

**HLT* 151: Health and Wellness Promotion**

3 Credits  
*(Formerly SSC 110)*

A survey of contemporary health concepts and concerns that affect life style. Students will learn to apply these concepts by assessing their own level of fitness. Topics include: disease in the United States, health models, fitness, nutrition, stress, drugs, alcohol, tobacco, alternative medicine and the concept of self care.

**Prerequisites:** ENG* 066
**Offered:** Fall, Spring

**HLT* 295: Allied Health Coop Work Experience**

3 Credits  
*(Formerly AH 270)*

This course provides students the opportunity to apply classroom theory in an actual work setting. Students may be placed in a variety of work settings as related to their program of study including hospitals, nursing homes, laboratories.
Prerequisites: 15 completed credit hours in Allied Health programs.
Offered: Fall, Spring

Health, Physical Education

HPE* 102: Human Performance and Fitness
3 Credits
(Formerly HPE* 102)
This course is designed to provide the background information concerning exercise prescription, development and follow through. Students will be trained in exercise testing, theory and ethics, and practical exercise programs for the beginning exerciser. They will receive a practical understanding of all aspects of fitness center operations from both a fitness specialist and management point of view.
Prerequisites: ENG* 066
Offered: Fall, Spring

HPE* 104: Adventure Based Dynamics
1 Credits
(Formerly HPE 158)
This course is designed to provide students with the knowledge, skills, and ability to: increase mutual support within diverse groups; develop leadership skills; increase skills in cooperative learning; develop team building skills; improve agility and interactive skills through hands-on experiences. Students will participate in problem solving situations and exercises to assist in the development of these skills.
Prerequisites: None
Offered: Fall, Spring

HPE* 107: Functional Fitness
1 Credits
This course focuses on increasing students' present fitness levels. Participation in this course will lead to increased energy, mental clarity, and health as a part of one's lifestyle. It will also teach students to recognize proper form and technique. This course may also provide opportunities for students to increase their cardiovascular conditioning, flexibility and/or develop strength and muscular endurance. Students will develop a basic understanding of the components of group exercise and will acquire the skills to recognize a safe and effective exercise class. Students will have an opportunity to observe and critique a certified instructor to gain a greater understanding of the role of that individual in successful group exercise.
Prerequisites: None
Offered: Fall, Spring

HPE* 110: Aerobics
1 Credits
(Formerly HPE 114)
Prerequisites: None
Offered: Fall, Spring

HPE* 116: Weight Training
1 Credits
(Formerly HPE 115)
Prerequisites: None
Offered: Fall, Spring
HPE* 119: Fitness Walking
1 Credits
(Formerly HPE 116)
Prerequisites: None
Offered: Fall, Spring

HPE* 147: Self Defense
1 Credits
Prerequisites: None
Offered: Fall, Spring

HPE* 164: Bowling
1 Credits
(Formerly HPE 132)
Prerequisites: None
Offered: Fall, Spring

HPE* 191: Basketball
1 Credits
Prerequisites: None
Offered: Fall, Spring

HPE* 192: Softball
1 Credits
(Formerly HPE 130)
Prerequisites: None
Offered: Fall, Spring

HPE* 193: Soccer
1 Credits
(Formerly HPE 131)
Prerequisites: None
Offered: Fall, Spring

HPE* 210: Sports Nutrition
3 Credits
This course explores concepts related to nutrition and conditioning for physically active individuals. The nutrition component of the course will include such topics as: micro and macro nutrients, dietary planning (pre/post competition meals/appropriate caloric intake), body composition and endurance/strength training, as well as designing individualized fitness programs.
Prerequisites: BIO* 111
Offered: Fall, Spring

HPE* 211: Fitness Specialist Certification
1 Credits
This class will prepare students, using a variety of teaching techniques, for the Personal Trainer Certificate through the American College of Sports Medicine (ACSM). Each student will develop writing proficiency for appropriate exercise recommendations, and demonstrate safe and effective methods of exercise, and motivating individuals to begin and to continue with their healthy behaviors.
Prerequisites: Completion of HPE* 210, HPE* 240 and HPE* 242
Offered: Fall, Spring

HPE* 217: Principles & practices of Coaching
3 Credits
(Formerly HPE 141)
An introduction to the basic principles and practices required in dealing with the arrangement, administration and organization of athletic programs. Emphasis is on coaching athletic teams: legal responsibilities, historical perspectives of sport, ethics of coaching, philosophy of coaching, sport psychology, sport pedagogy, sports medicine and safety. This course meets the State of Connecticut coaching certification requirement.
Prerequisites: None
Offered: Fall, Spring

HPE* 240: Principles of Fitness
3 Credits
(Formerly HPE 120)
A survey of sport/exercise/fitness physiology and its application to sport performance and fitness. Emphasis will be placed on the study of physiological changes associated with the human body as you begin training for various sports. This will include the cardiovascular system, respiratory system, endocrine system, neuromuscular physiology, bone health, and essential nutrient intake.
Prerequisites: BIO* 115 and HPE* 102
Offered: Fall, Spring

HPE* 242: Introduction to Athletic Training
3 Credits
(Formerly HPE 140)
An introduction to the basic concepts and techniques in the prevention, diagnosis, treatment and rehabilitation of athletic injuries. Practical applications are examined as the basic concepts of training, conditioning, diet and nutritional needs are presented. Extensive experience in taping and on field care is an important aspect of the course.
Prerequisites: BIO* 115 and HPE* 102
Offered: Fall, Spring

HPE* 252: Introduction to Physical Education
3 Credits
(Formerly HPE 201)
An introduction to the professional aspects of physical education. Includes the history, philosophy and foundation of the role of physical education in society today. Topics in the course will involve the philosophical and scientific foundations of physical education and an examination of literature, scientific inquiry, exercise prescription, and career options available.
Prerequisites: BIO* 115 and HPE* 102
Offered: Fall, Spring

HPE* 257: Adapted Physical Education
3 Credits
(Formerly HPE 202)
An introduction to the instructional adaptations necessary to meet the physical activity needs of students with disabilities. Individual assessments, educational planning, service delivery and advocacy for special needs, are content areas stressed in this course. It draws on the fields of adapted physical education, special education, psychology, medicine, occupational therapy, physical therapy, and therapeutic recreational service to provide a complete, comprehensive resource.
Prerequisites: HPE* 252 or permission of the instructor
Offered: Fall, Spring

HPE* 261: Yoga
1 Credits
This course focuses on increasing students' present fitness levels. Participation in this course will lead to increased energy, mental clarity, and health as a part of one's lifestyle. It will also teach students to recognize proper form and technique. This course may also provide opportunities for students to increase their cardiovascular conditioning, flexibility and/or develop strength and muscular endurance. Students will develop a basic understanding of the components of group exercise and will acquire the skills to recognize a safe and effective exercise class. Students will have an opportunity to observe and critique a certified instructor to gain a greater understanding of the role of that individual in successful group exercise.
Prerequisites: None
Offered: Fall, Spring

HPE* 274: Zumba
1 Credits
This course focuses on increasing students' present fitness levels. Participation in this course will lead to increased energy, mental clarity, and health as a part of one's lifestyle. It will also teach students to recognize proper form and technique. This course may also provide opportunities for students to increase their cardiovascular conditioning, flexibility and/or develop strength and muscular endurance. Students will develop a basic understanding of the components of group exercise and will acquire the skills to recognize a safe and effective exercise class. Students will have an opportunity to observe and critique a certified instructor to gain a greater understanding of the role of that individual in successful group exercise.
Prerequisites: None
Offered: Fall, Spring

History

HIS* 101: Western Civilization I
3 Credits
(Formerly HIST 101)
An examination of major themes in the development of Western Civilization from the earliest historical beginnings. Topics include: Ancient Middle East, Greece and Rome, Medieval and Renaissance Europe.
Prerequisites: Eligibility for ENG* 101
Offered: Fall, Spring, Summer
Fulfills General Education - Mode 6
Fulfills General Education - Knowledge of Human Expressions & Behavior

HIS* 102: Western Civilization II
3 Credits
(Formerly HIST 102)
This course examines the history of Western Civilization from the Protestant Reformation to the Cold War. HIS* 101 and HIS* 102 need not be taken in sequence.
Prerequisites: Eligibility for ENG* 101.
Offered: Fall, Spring
Fulfills General Education - Mode 6
Fulfills General Education - Knowledge of Human Expressions & Behavior
HIS* 121: World Civilization I
3 Credits
(Formerly HIST 121)
Beginning with an examination of the most ancient human societies, as revealed in the archaeological record, the course goes on to study the origin, development and spread of the major civilizations in the world, their contacts, interactions and cross-fertilization down to the point at which the civilization of Western Europe begins its world-wide expansion.
Prerequisites: Eligibility for ENG* 101
Offered: Fall, Spring
Fulfills General Education - Mode 6
Fulfills General Education - Knowledge of Human Expressions & Behavior

HIS* 122: World Civilization II
3 Credits
(Formerly HIST 122)
This course studies the major trends and conflicts throughout the world after 1500 to the present, focusing on the impact of and reaction to the Western world through slavery, imperialism, the two world wars, and the Cold War.
Prerequisites: Eligibility for ENG* 101.
Offered: Fall, Spring
Fulfills General Education - Mode 6
Fulfills General Education - Knowledge of Human Expressions & Behavior

HIS* 130: An Introduction to the History of Science
3 Credits
This course is an introduction to the history of science from antiquity to the present, which will closely examine the historical forces and figures that shaped the creation of scientific knowledge. Since scientists did not work in a vacuum, it will pay particular attention to interaction between their work and the broader historical context in which they lived. In so doing, it will explore scientific ideas that have not survived to the modern era (the theory of phlogiston, for example) and examine the processes by which they were overturned.
Prerequisites: Eligibility for ENG* 101.
Offered: Occasionally

HIS* 201: United States History I
3 Credits
(Formerly HIST 201)
The course represents a social, political, and economic survey of America beginning before the arrival of Columbus and continuing to 1877 through an analysis of the transformation from Native American to Anglo-American society, from sectionalism to national unity, from westward expansion to urban development and an examination of the forces shaping American thinking and society. Other topics will feature race, ethnicity, women, and family issues.
Prerequisites: Eligibility for ENG* 101
Offered: Fall, Spring, Summer
Fulfills General Education - Mode 6
Fulfills General Education - Knowledge of Human Expressions & Behavior

HIS* 202: United States History II
3 Credits
(Formerly HIST 202)
The course represents a social, political, and economic survey of the United States from 1877 to the present through an analysis of the growth of transportation, industrialization, urbanization, technology, and imperialism and an analysis of their effects in shaping American thinking and society. The discussion will also feature
women’s suffrage, civil rights, and ethnic and minority issues.

**Prerequisites:** Eligibility for ENG* 101  
**Offered:** Fall, Spring, Summer  
**Fulfills General Education - Mode 6**  
**Fulfills General Education - Knowledge of Human Expressions & Behavior**

**HIS* 210: History of Colonial America**

3 Credits  
(Formerly HIST 210)  
A study of the 13 American colonies in the 17th and 18th centuries with emphasis on the Europeans and Africans who settled the colonies. Field trips will be included.  
**Prerequisites:** Eligibility for ENG* 101.  
**Offered:** Occasionally

**HIS* 212: The City in American History**

3 Credits  
(Formerly HIST 204)  
An examination of the impact of the city upon American life, centered around the transformation from the 17th century, pre-industrial town to the post-industrial 20th century city. Field trips are included.  
**Prerequisites:** Eligibility for ENG* 101.  
**Offered:** Occasionally

**HIS* 213: The U.S. Since World War II**

3 Credits  
(Formerly HIST 215)  
America’s political, social, intellectual and diplomatic history, with emphasis on the period from 1945 to present. Topics include: the Cold War and Détente, the quest for social justice, the changing face of urban America, race relations, social and political upheavals.  
**Prerequisites:** Eligibility for ENG* 101.  
**Offered:** Occasionally

**HIS* 214: Racial and Ethnic History of the United States**

3 Credits  
(Formerly HIST 220)  
This course will examine immigration to this country from Europe, Africa, Asia and Latin America. It will explore whence we came and why, and how we adapted to life in the United States while retaining emotional attachments to our homelands. Field trips and slide lectures complement class discussions and readings.  
**Prerequisites:** Eligibility for ENG* 101.  
**Offered:** Occasionally

**HIS* 215: The History Of Women in the US**

3 Credits  
This course focuses on American women from pre-contact period to the late 20th century. Special emphasis will be given to the effects of race, class and ethnic origins on the history of particular groups of American women including slave society, women’s rights movement, labor organizations, and social justice movements.  
**Prerequisites:** Eligibility for ENG* 101.  
**Offered:** Occasionally
HIS* 216: African American History I
3 Credits
(Formally HIST 230)

In the Americas with an emphasis on British North America and the United States before 1877. Students will explore a variety of issues such as the causes of the African slave trade, the impact of slavery on both whites and blacks, the African influence on American culture, the slaves’ contribution to the growth of the American economy and industrialization, the rhetoric and reality of freedom and slavery, and the cause and legacy of the Civil War.

Prerequisites: Eligibility for ENG* 101.

Offered: Occasionally

HIS* 217: African American History II
3 Credits

This course focuses on the experience of African Americans since 1877 within the broad context of American history. Students will explore the rise of the Jim Crow laws and sharecropping system in the South and the impact of racial segregation at the national level in late nineenth century, examine the growth and achievement of the civil rights movement, and assess the evolution in racial relationship in American society in the twentieth century and beyond.

Prerequisites: Eligibility for ENG* 101.

Offered: Occasionally

HIS* 219: An American Revolution
3 Credits

Unlike the introductory U.S. history courses that provide a general survey of the settlement, development and growth of the American colonies and subsequent republic, this course focuses specifically on the American Revolution. It explores the events, issues, and players from a fresh perspective during the Independence period. This course’s primary focus is on the ideas and actions of the ordinary people and the diverse groups such as the farmers, slaves, women, and Continental solders. It will examine how these people reacted to the dominant ideas, what actions they participated in pursuing freedom and liberty and how the rhetoric and reality converged or collided, and ultimately what unifying forces prevailed to create the new republic.

Prerequisites: Successful completion of HIS* 201

Offered: Occasionally

HIS* 224: The American Indian
3 Credits
(Formally HIST 224)

A Survey of the History of American Indians) The course offers students a balanced perspective of Native American people from an ethnohistory point of view. By studying primary sources, including the voices of native people, formal historical texts and the popular press, the course will offer a new look at the complex story of the original residents of the North American territory that we now call the United States.

Prerequisites: Eligibility for ENG* 101.

Offered: Occasionally

HIS* 227: The Vietnam War
3 Credits
(Formally HIST 227)

This course will analyze the history of America’s role in Vietnam from 1945 to 1975. To understand the Vietnam War, however, broad themes must be assessed such as the history and culture of Vietnam, the rise of the Third World, and the impact of the Cold War on U.S. Vietnam policy. Other important issues that will be discussed include the importance of domestic affairs on the Vietnam War, the U.S. Military’s role in the war,
and the world-view of U.S. Presidents as diverse as Dwight Eisenhower and Lyndon Johnson. Because the war has produced a long-lasting legacy on American culture, the post Vietnam War years will also be examined in detail. How the last three decades of politics, music, film, and literature have been influenced by the Vietnam War will be subject of in-depth analysis.

**Prerequisites:** Eligibility for ENG* 101.

**Offered:** Occasionally

**HIS* 228: Colonial New England**

3 Credits

A Survey of colonial New England from the 1500s to the 1770s. Topics will include, but not limited to, an examination of the land and people prior to British settlements, the motivations of English migration to the region, the ecological impacts under the English, the social and economic developments, the role of religion, the church-and-state relations, local governments, the rise of local opposition against British rule, the role of New England in the Revolutionary movement.

**Prerequisites:** Successful completion of HIS* 201

**Offered:** Occasionally

**HIS* 232: A Survey of Russian History**

3 Credits

A Survey of Russian History examines key elements in Russia’s history beginning with its origins and concluding with the death of Joseph Stalin. Among the topics included: Mongol influence, the issue of serfdom, the legacy of Peter the Great, industrialization, Russia at war, the Revolution of 1917 and Civil War, creation of the Soviet Union, Stalin and Stalinism.

**Prerequisites:** Eligibility for ENG* 101.

**Offered:** Occasionally

**HIS* 242: Modern Ireland**

3 Credits

(Formerly HIST 222)

Study focuses on the political, social, cultural and economic development of Ireland after 1600. Major themes discussed include: Ireland’s relationship with Britain, the role of the Catholic Church, emigration, and the creation of the divided modern Irish state.

**Prerequisites:** Eligibility for ENG* 101.

**Offered:** Occasionally

**HIS* 244: Europe in the 20th Century**

3 Credits

(Formerly HIST 242)

An introductory survey of the diplomatic, political, social and intellectual history of Europe from 1914 to present.

**Prerequisites:** Eligibility for ENG* 101.

**Offered:** Spring

**HIS* 245: The World at War**

3 Credits

This course will examine the aftermath of World War I and the coming of World War II. Special emphasis is given to the role of the Versailles Treaty and its connection to the failure of democracy and the rise of totalitarianism in pre-war Europe. This course also examines the global dimensions of World War II and the emergence of the Soviet Union and United States as superpowers. Students will be asked to study traditional historical texts as well as selections from the literature and art of the period.
Prerequisites: Eligibility for ENG* 101.
Offered: Occasionally

HIS* 262: Modern Latin America
3 Credits
This course is a survey of Latin American history from the early-nineteenth century to the present day. It is designed to introduce students to significant issues and trends in the region, broadly defined as lands in the western hemisphere south of the Rio Grande, including the Caribbean islands. The course is organized chronologically and will emphasize three major themes. It will begin with the end of the colonial period by examining the process of state formation as the region emerged from three centuries of European colonialism. It also will examine the impact of U.S. influence on Latin America, particularly from the late-nineteenth century to the present. The third major theme the course will address is the phenomenon and consequences of revolution during the twentieth century.
Prerequisites: Eligibility for ENG* 101
Offered: Occasionally

HIS* 272: Modern China
3 Credits
(Formerly HIST 281)
The impact of Western encroachment on China in the 19th century, the attempts of China to deal with the West and with problems arising from contact with the West, the Revolution of 1911 and the period of Nationalist control, the conflict with Japan, the growth and victory of the Communist Party, and the internal changes wrought by the People’s Republic of China since 1949 will be studied.
Prerequisites: Eligibility for ENG* 101.
Offered: Occasionally

HIS* 280: Modern Africa
3 Credits
(Formerly HIST 280)
Modern Africa focuses on the history of the continent after 1500 through the study of African states and societies on the eve of European contact, the impact of the Trans-Atlantic slave trade, the Scramble for Africa, de-colonization and the creation of contemporary African states.
Prerequisites: Eligibility for ENG* 101.
Offered: Occasionally

HIS* 284: South Africa
3 Credits
(Formerly HIST 284)
This course will analyze the history of South Africa from pre-Colonial times through the end of Apartheid and the establishment of majority rule in 1994. South Africa’s history offers a unique look at European colonialism in Africa and the implementation of legislative racism from the 1940s on. Analyzing South Africa’s mineral revolution of the mid-nineteenth century allows the studying of labor migration and its impact on traditional African societies, their traditions, norms, and mores.
Prerequisites: Eligibility for ENG* 101.
Offered: Occasionally

Hospitality Management

HSP* 100: Introduction to the Hospitality Industry
3 Credits
A survey course encompassing three major areas of the Hospitality Industry: the foodservice industry including
restaurants, institutions, clubs, and schools; the hotel-motel industry, including travel and tourism; and hospitality management theories, styles, and laws. Career opportunities are emphasized in each area.

Prerequisites: Eligibility for ENG* 101 or ENG* 093 taken concurrently.

Offered: Fall, Spring

**HSP* 101: Principles of Food Preparation**

3 Credits

*(Formerly HOSP 101)*

Introduces techniques and procedures required to prepare basic foods in a hands-on kitchen laboratory environment. Emphasis is placed on use of equipment, identification of a standard quality product, and the importance of methods by which to develop sanitary working habits. Class: 1 hour per week. Laboratory: 3 1/2 hours per week.

Prerequisites: Eligibility for MAT* 109 or MAT* 095 taken concurrently

Offered: Fall, Spring

**HSP* 103: Principles of Baking I**

3 Credits

The course presents an introduction to baking and pastry with intensive hands-on laboratory training in a quantity food environment. The course competencies concentrate on the production and quality control of baked goods that are used in hotels, restaurants, resorts and institutions. Laboratory classes emphasize basic ingredients and production techniques for breads, rolls, folded dough’s, batters, basic cakes, pies and creams.

Prerequisites: Eligibility for MAT* 109 or MAT* 095 taken concurrently

Offered: Fall, Spring

**HSP* 107: Icing Artistry I**

3 Credits

This class introduces students to the fundamental and necessary skills for commercial cake decorating. Students learn the basic techniques in butter cream frosting, royal icing, borders and decorations. Students will design a multi-tiered cake. Class: 1 hour per week. Laboratory: 3.5 hours per week.

Prerequisites: Eligibility for MAT* 109 or concurrently enrolled in MAT* 095.

Offered: Fall, Spring

**HSP* 108: Sanitation and Safety**

3 Credits

*(Formerly HOSP 112)*

A study of sanitation and safety problems encountered in the foodservice industry, and controls and solutions to those problems. Moral, legal and economic aspects of food protection problems and solutions are discussed. The National Restaurant Association’s Applied Foodservice Sanitation Certification Exam will be offered during this course.

Prerequisites: Eligibility for ENG* 101, or ENG* 093 taken concurrently

Offered: Fall, Spring

**HSP* 112: Advanced Food Preparation**

4 Credits

*(Formerly HOSP 102)*

Full-course American style menus are prepared in quantity. Students experience various responsibilities in the dining room and kitchen areas. Emphasis is on preparation or recipes, purchase orders, requisitions and income and expense summaries. Class: 1 hour per week. Laboratory: 5 hours and 30 minutes per week.

Prerequisites: C- or better in HSP* 101 and HSP* 108. HSP* 108 may also be taken concurrently.

Offered: Fall, Spring
**HSP* 115: Food Store Systems**
3 Credits
(Formerly HOSP 125)
An introduction to the food store business with a focus on structure, department identification and function, department interdependence, personnel, the role of management, marketing and merchandising, and future direction.
**Prerequisites:**
Eligibility for ENG* 101 or concurrently enrolled in ENG* 093.
**Offered:** Occasionally

**HSP* 117: Beverage Management**
3 Credits
A study of the history, manufacture and sale of wines, brewed beverage and distilled spirits. Special emphasis is given to responsible use of these products through Training for Intervention Procedures by Servers of Alcohol (TIPS), a nationally recognized certification program. Legal and social issues involving beverage alcohol are also explored.
**Prerequisites:** Eligibility for ENG* 101 or ENG* 093 taken concurrently and C- or better in HSP* 100.
**Offered:** Fall

**HSP* 201: International Foods**
4 Credits
(Formerly HOSP 217)
Full-course, ethnic menus are planned, prepared and served by student teams. Emphasis is on organization, showmanship and supervision. Students will provide both oral and written reports on the menu presentations including food and labor costs, product and production analysis, and menu presentation and delivery. Class: 1 hour per week. Laboratory: 5 1/2 hours per week.
**Prerequisites:** C- or better in HSP* 112
**Offered:** Fall, Spring

**HSP* 207: Icing Artistry II**
3 Credits
An advanced course in methods of cake decorating. Students will learn to work in advanced sugar and decorating mediums, demonstrating molding, embossing and draping. Students will design and create a wedding cake.
**Prerequisites:** HSP*105 (no longer offered) or C- or better in HSP* 107
**Offered:** Occasionally

**HSP* 210: Buffet Catering**
4 Credits
Students experience artistic production such as ice carving, platter presentation and garnishing. Emphasis is placed on buffet set-up and a variety of dining room service styles including tableside, French, and Russian service. The management of a successful catering business is studied. Students participate in community service catered functions. Class: 1 hour per week. Laboratory: 5.5 hours per week.
**Prerequisites:** C- or better in HSP* 112.
**Offered:** Fall, Spring
HSP* 211: Food and Beverage Cost Control

3 Credits
(Formerly HOSP 203)
A theoretical and practical approach to the various aspects of food and beverage cost control and purchasing. Includes a computer application model for foodservice management programs based on the Costguard Purchasing software system. Note: Successful completion of HSP* 101 or HSP* 103.

Offered: Fall

HSP* 215: Principles of Baking II

3 Credits
This course focuses on the preparation of advanced pastries and classical desserts. Included are the preparation of petit fours, dessert sauces, French dough’s, ice cream, sugar work, chocolate work, European tarts, tortes, and plate decoration ice cream. Laboratory classes are complemented with baking and pastry arts related studies that introduce management operations and procedures in the baking profession.

Prerequisites: C- or better in HSP* 103, and C- or better in HSP* 108 or taking HSP* 108 concurrently

Offered: Fall, Spring

HSP* 216: Artisan Bread

3 Credits
This course focuses on the formulation, preparation, packaging and pricing of commercially produced artisan breads. As a "bakery team" the class will learn how to work with pre-ferments, levains, commercial starters, enriched dough and naturally leavened breads, while maintaining a professional work environment. There will be an emphasis on the science of bread production as well as the "art of baking." Class: 1 hour per week.

Laboratory: 3.5 hours per week.

Prerequisites: C- or better in HSP* 103

Offered: Occasionally

HSP* 225: Principles of Baking III

3 Credits
(Formerly HSP* 235: Advanced Pastry Arts)
This is a lecture and laboratory course on the principles, techniques, and materials used in upper level bake shop and competition piece production. Units covered include sculpture of chocolate, sugar, pastillage, marzipan, salt dough, and dessert presentation.

Prerequisites: C- or better in HSP* 215

Offered: Occasionally

HSP* 230: Sustainable Food Service Management

3 Credits
Food impacts all areas of our lives including the environment, local economies, global economy, social well-being, and human health. This course is designed to help students understand the complex issues surrounding food that ultimately impact sustainability. Topics include understanding sustainable food, local and seasonal production, socially just and unjust means of producing foods, processed foods and food choices.

Prerequisites: Successful completion of HSP* 100.

Offered: Occasionally

HSP* 233: Hospitality Human Resource Management

3 Credits
(Formerly HOSP 214)
A course in managing people, including recruiting, training, motivating and supervising. Forecasting, staff planning and payroll controls are included. Emphasis is on the supervisor from the standpoint of his or her
effectiveness in motivation, communication and productivity.

**Prerequisites:** C- or better in HSP* 100

**Offered:** Fall

**HSP* 237: Hospitality Marketing**

3 Credits
*(Formerly HOSP 231)*

A course to familiarize students with hospitality sales practices used in restaurants, hotels and clubs, from market analysis to actual sales activity. The course includes guest lectures, term projects, and voluntary membership in the Hotel Sales Management Association.

**Prerequisites:** C- or better in HSP* 100.

**Offered:** Fall

**HSP* 238: Relationship Marketing**

3 Credits
*(Formerly HOSP 260)*

The purpose of this course is to give the student a solid foundation in customer service systems. Students will learn concepts and skills necessary to perform effectively in a customer driven service economy. This course will focus on the concepts and applications of communications, strategic planning, teamwork, coaching, and vision building, as well as an introduction to Total Quality Management. This course emphasizes the importance of development and retention of repeat customers and business buyers.

**Prerequisites:** Eligibility for ENG* 101.

**Offered:** Spring

**Cross listed as:** BMK* 260

**HSP* 242: Hotel Management**

3 Credits
*(Formerly HOSP 241)*

This course presents a systematic approach to front office procedures by detailing the flow of business through a hotel, beginning with the reservation process and ending with the check-out and settlement. The course also examines the various elements of effective front office management, paying particular attention to planning and evaluating front office operations and to personnel management. Front office procedures and management are placed within the context of the overall operations of hotels.

**Prerequisites:** HSP* 100.

**Offered:** Spring (every even year)

**HSP* 244: Meeting, Convention and Special Event Management**

3 Credits
*(Formerly HOSP 232)*

This course offers a practical insight into the different kinds of special events, the types of organizations that stage such events, and the people who make them possible. The course will also include how to sell, lead and analyze an event.

**Prerequisites:** HSP* 100

**Offered:** Occasionally

**HSP* 290: Classical Cuisine**

3 Credits

This course provides techniques in the development and presentation of hot, cold, and specialty foods used in competition. Emphasis will be placed on necessary skill development to obtain certification through the American Culinary Federation. Opportunities will be provided throughout the course to network with area chefs.
and to participate in culinary competitions.

**Prerequisites:** HSP* 112 and HSP* 103

**Offered:** Occasionally

**HSP* 291: Culinary Competition**

3 Credits

This course provides the opportunity for students to further develop techniques in producing cold platter presentation, dessert platters, cakes, and hot food presentation. Students will use advanced techniques in order to compete at a State, Regional or National level. Students in the class will mentor beginning Culinary Competition students in developing techniques to produce a competition pieces. Upon completion of this course students will be able to begin work towards a certification through the American Culinary Federation.

**Prerequisites:** C- or better in HSP* 290.

**Offered:** Occasionally

**HSP* 296: Cooperative Education/Work Experience**

3 Credits

(Formerly HOSP 270)

This course provides students the opportunity to apply classroom theory in an actual work setting. Students may be placed in a variety of work settings as related to their program of study including corporations, institutions, restaurants, hotel and conference settings.

**Prerequisites:** 12 completed credit hours in a Hospitality Careers program.

**Offered:** Spring, Summer

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**Human Services**

**HSE* 101: Introduction to Human Services**

3 Credits

(Formerly HS 101)

Course includes history of the human service movement, introduction to current theory and knowledge related to human services, and survey of contemporary helping professions.

**Prerequisites:** None

**Offered:** Fall

**HSE* 118: Case Management in Human Services**

3 Credits

This course will provide an overview of the skills and knowledge necessary to provide case management services for children at risk.

**Prerequisites:** None

**Offered:** Occasionally

**HSE* 134: Introduction to the Mental Health System**

3 Credits

This course will review the nature, history and stigma of psychiatric illness and the various treatment modalities over time. The course will also cover classification of psychiatric diagnoses, ethics, co-occurring disorders, psychiatric rehabilitation and criminal justice involvement. Topics can include treatment approaches, case management, psychosocial rehabilitation, public awareness, and a special emphasis on social role valorization and empowerment.

**Prerequisites:** None

**Offered:** Fall
HSE* 180: Explorations in Human Abuse
3 Credits
(Formerly HS 105)
This course will provide an overview of the impact of abuse on children including the warning signs that may signal abuse and the profiling of potential abusers.
Prerequisites: None
Offered: Fall

HSE* 210: Group & Interpersonal Relations
3 Credits
(Formerly HS 201)
Current group theory, knowledge, methods and skills are covered that lead to beginning competence in helping people problem solve through group experience.
Prerequisites: HSE* 101 or employment in a human service position.
Offered: Fall, Spring

HSE* 211: Ethics in the Helping Profession
3 Credits
Human service workers shoulder the responsibility of assessing and managing client risk, safety and autonomy. Work settings may be institutional or community-based. Every day, workers encounter difficult situations in which the right thing for the worker to do is not always clear. Further, workers often lack specific training and regular support in this area. Ethical conflicts are posed by conflicting roles and duties. It is important students working with all client/consumer groups to understand and respond to ethical and legal issues that arise.
Prerequisites: HSE* 101
Offered: Occasionally

HSE* 220: Juveniles in the Human Service System
3 Credits
The course will explore the unique nature of needs of juvenile clients. Explorations will include the family, community, educational systems and peer groups. Current theories, models and programming will be examined.
Prerequisites: HSE* 101
Offered: Occasionally

HSE* 241: Human Services Agencies and Organizations
3 Credits
(Formerly HS 252)
An introduction to the study of human service organizations. The skills, methods, and functions of human service providers are explored, developed, analyzed, presented and integrated into the overall learning experience of the students. Through the utilization of group process, students will develop and present a grant proposal.
Prerequisites: HSE* 101, HSE* 251, and HSE* 210, and completion of HSE* 281 concurrent enrollment in HSE* 282
Offered: Spring

HSE* 251: Work with Individuals and Families
3 Credits
(Formerly HS 152)
An introduction to current knowledge and theory related to understanding basic human needs. Classroom practice of the interactional skills needed in the helping professions: assessment, planning, contracting, interventions, interviewing and evaluation is studied. Self-awareness regarding personal values and professional
ethics is developed.

**Prerequisites:** HSE* 101 or 6 credits in psychology.

**Offered:** Spring

**HSE* 281: Human Services Field Work I**

3 Credits

*(Formerly HS 291)*

120 hours of supervised field work in a cooperating human service agency. Attendance is required at weekly pro-seminar meetings.

**Prerequisites:** HSE* 101, HSE* 210, and HSE* 251 and permission of coordinator.

**Offered:** Fall

**HSE* 282: Human Services Field Work II**

3 Credits

*(Formerly HS 292)*

120 hours of supervised field work in a cooperating human service agency. Attendance is required at weekly pro-seminar meetings.

**Prerequisites:** HSE* 101, HSE* 251, HSE* 210, HSE* 281 and permission of coordinator.

**Offered:** Spring

**HSE* 294: Disability Specialist Seminar**

1 Credit

This course, while assisting the student in identifying employment opportunities, will focus on ethics, confidentiality, collaboration, problem-solving, and utilizing Life Building exercises to define a vision for a positive future for themselves and people with disabilities.

**Prerequisites:** None

**Offered:** Fall, Spring

**Humanities**

**HUM* 101: Introduction to the Humanities**

3 Credits

Through exposure to a variety of the humanities such as the arts, literature, music and dance, students should be able to understand the historical development of the humanities including: literature, music, painting, theatre and philosophy. Students should also be able to identify major movements and thinkers within the liberal arts and analyze works within the humanities, both with reference to other, similar works and as individual objects of study.

**Prerequisites:** Eligibility for ENG* 093

**Offered:** Fall, Spring

Fulfills General Education - Mode 3
Fulfills General Education - Knowledge of Human Thought & Expression

**HUM* 125: Introduction to Peace and Conflict Studies**

3 Credits

This course is an interdisciplinary study of the concepts of peace and conflict as they relate to economic, sociological, psychological, historical, political, technological, cultural, ideological, geographical, and environmental factors since the end of the Cold War. Students will familiarize themselves with the concepts of positive and negative peace, peacemaking, the principles of a culture of peace, and the roots of conflict. Students will also learn to engage in careful and sustained reflection on some of the major problems confronting humankind today, as well as on the issues of conflict management at the international level, and, finally, on their personal roles and responsibilities as world citizens.
Prerequisites: Eligibility for ENG* 101
Offered: Fall, Spring

HUM* 172: Harlem Renaissance
3 Credits
(Formerly HUMN 201)
Students will explore and experience the incredible surge of creative activity in literature, music, the visual and performing arts by African Americans in the 1920s.
Prerequisites: ENG* 101 or permission of the instructor
Offered: Occasionally
Fulfills General Education - Mode 3

HUM* 178: Native People: The Art, Film and Literature
3 Credits
The 12,000 year old art, music, and oral story telling traditions of native/indigenous peoples (commonly called Indians) throughout the western hemisphere from Chile to the Arctic Circle will be explored, experienced, and shared in this class. In addition, the written word about and, now, by Native Peoples will be read and discussed in depth. Finally, the newest media of film, DVDs, and TV will be reviewed with a critical eye to accuracy of content and artistic value.
Prerequisites: Eligibility for ENG* 101.
Offered: Spring

HUM* 181: Performance Skills
3 Credits
(Formerly HUMN 110)
Personal growth course in effective communication skills in the performing arts and job-related presentations. Students will learn to focus energy to overcome performance anxiety and project more ease in professional, business and social situations. Fees for performance skills lessons are in addition to regular tuition and are arranged between student and teacher.
Prerequisites: Permission of instructor
Offered: Occasionally

Interdisciplinary Studies

IDS* 201: Explore [Theme]
3 Credits
What is the purpose of liberal education in my life and in society? Why do I have to take general education courses unrelated to my major or program to graduate? How can I integrate the knowledge and skills developed from all of my courses to enrich my understanding of the theme of this course and prepare me for the challenges and opportunities I will face after graduation? In the beginning of this interactive class, students will explore answers to these questions. Throughout the semester students will develop the essential intellectual skills needed to succeed in the 21st century: integrative learning, interdisciplinary inquiry, creative and critical thinking, and collaborative problem solving. Students will learn how to apply these skills through learning projects that will broaden and deepen their understanding of the theme of this course and hone their ability to effectively communicate their ideas.
Prerequisites: ENG* 101 with a grade of "C" or better, plus at least 9 additional college credits with a grade of "C" or better
Offered: Fall, Spring
Legal

LGL* 102: Legal Research and Writing
3 Credits
(Formerly LEGL 112)
Provides an understanding of the basic tools of legal research. Students will become familiar with the use of the law library, examining primary and secondary authorities and law-finding tools. Research procedural methods are advanced through case examples and problem-solving techniques. Research findings are reported in legal memoranda. An off-campus law library must be used.
Prerequisites: POL* 120
Offered: Fall, Spring

LGL* 103: Legal Ethics and Professional Responsibility
1 Credits
(Formerly LEGL 110)
Introduces students to the paralegal profession and the basic ethical principles which regulate those working in law, placing special emphasis on how the rules affect paralegals. Regulation of attorneys and unauthorized practice of law is discussed with reference to permitted paralegal tasks. Critical issues such as conflicts of interest, confidentiality, competence, and financial matters are emphasized. Students will become familiar with the law affecting lawyers and paralegals, including the American Bar Association Rules of Professional Conduct, and guidelines and codes adopted by bar and paralegal professional organizations.
Prerequisites: POL* 120 or eligibility for ENG* 101 or permission of instructor
Offered: Fall, Spring

LGL* 104: Real Estate Practice
3 Credits
(Formerly LEGL 207)
Examines basic principles of real property law, with an emphasis on the role of paralegals in residential real estate transactions. Areas studied include acquisition of real property and fixtures, surveys and legal descriptions, co-ownership, easements and other encumbrances, marketable record title and title insurance, brokers, sales contracts, mortgage financing, and closing procedures. Students gain practical experience through document preparation, and familiarity with land records through assignments. Ethical issues related to this practice area are discussed.
Prerequisites: POL* 120 or eligibility for ENG* 101 or permission of instructor
Offered: Spring

LGL* 206: Bankruptcy Law
3 Credits
(Formerly LEGL 212)
Provides an introduction to and understanding of basic bankruptcy practice and procedure for the paralegal. Students are taught the basic legal concepts, legal ethics, and skills which are needed in a bankruptcy practice. Familiarity with the federal bankruptcy courts, the role of the trustee, and the fundamental goals, procedures, documents and forms of Chapters 7, 11, and 13 of the United States Bankruptcy Code will be stressed. Students will be introduced to both federal and state legislation impacting bankruptcy. Practical applications and drafting of necessary documents and forms will be included.
Prerequisites: LGL* 211 or BBG* 234
Offered: Occasionally
LGL* 208: Litigation
3 Credits
(Formerly LEGL 221)
Provides the student with a basic understanding of the civil litigation process as preparation for employment as a paralegal. The course surveys and reviews the civil litigation process in state and federal courts, including the form and content of documents used in instituting or defending civil lawsuits. Students will be taught legal concepts and skills necessary to work as a litigation paralegal. Emphasis is given to court and office procedures before, during, and after trial, including causes of action and remedies, lawyer and client relationships and ethics, discovery, pleadings, organization of evidence, juries and verdicts; structure of a civil trial; post-trial motions; judgments; appeals, settlements, releases, and dismissals; and arbitration and mediation.
Prerequisites: POL* 120 or eligibility for ENG* 101 or permission of instructor
Offered: Fall, Spring

LGL* 209: Probate Practice
3 Credits
(Formerly LEGL 231)
Provides a basic understanding of the fundamental principles of law and legal terminology relating to the control and disposition of property before and after death, the probate court system and the probate process. Students will be taught basic concepts concerning wills, trusts, probate administration, estate and gift taxation, and fiduciary accounting. Responsibilities, ethical considerations, and duties of the paralegal in the handling of an estate will be stressed. Students will gain practical experience through exposure to document preparation, file management, and preparation of forms for estate administration. Probate matters such as emancipation, adoption, guardianship and conservatorships will be reviewed.
Prerequisites: POL* 120 or eligibility for ENG* 101 or permission of instructor
Offered: Fall

LGL* 210: Family Law
3 Credits
(Formerly LEGL 222)
Provides an introduction to and basic understanding of family law and practice for the paralegal. Students will be taught legal concepts regarding the scope and skills needed in a family law practice. Familiarity with legislation, legal terminology, and legal requirements in the area of family law will be stressed. Topics covered will include family law research, ethics, interaction with the client, premarital agreements, ceremonial and common law marriages, annulment, separation, dissolution of marriage, child custody, child support, tax consequences, legal rights of women and men, legal status of children, adoption, and surrogacy. Practical applications and drafting of documents will be included.
Prerequisites: POL* 120 or eligibility for ENG* 101 or permission of instructor
Offered: Occasionally

LGL* 211: Business Organization
3 Credits
(Formerly LEGL 211)
Provides an introduction to and understanding of the basic principles of law that apply to the formation of business organizations including sole proprietorship, general partnership, limited partnership, LLC, LLP, and corporation. Students will be taught legal concepts regarding the scope and skills needed by the paralegal in the formation and operation of these business forms. Familiarity with legislation, legal terminology, legal ethics, and legal requirements will be stressed. Practical applications and drafting of necessary documents and forms will be included.
Prerequisites: POL* 120 or eligibility for ENG* 101 or permission of instructor
Offered: Spring
LGL* 212: Commercial Law
3 Credits
Provides a framework for the legal and ethical considerations impacting many basic commercial transactions, and deals with the formation of contracts and the rights and responsibilities of contracting parties. Specific topics included are contract law and the Uniform Commercial Code, including sales, secured transactions, and negotiable instruments. Also covered are aspects of agency, partnerships, corporations, limited partnerships, limited liability companies, and bankruptcy.
Prerequisites: POL* 120 or eligibility for ENG* 101 or permission of instructor
Offered: Fall, Spring
Cross listed as: BBG* 236

LGL* 215: Environmental Law
3 Credits
Formerly LEGL 215
Provides an introduction to and a basic understanding of environmental law for the paralegal. Students will be taught basic concepts regarding both national and state environmental laws. Familiarity with legislation, legal terminology and legal requirements in the area of environmental law will be stressed. Practical application will be presented.
Prerequisites: POL* 120, eligibility for ENG* 101, or permission of instructor
Offered: Occasionally

LGL* 216: Administrative Law
3 Credits
Formerly LEGL 205
Presents a basic understanding of legal concepts affecting public administrative agencies, including the way in which administrative agencies fit into the United States system of government, delegation of authority and separation of powers, the types and organization of administrative agencies, sources of administrative law, rule making, legislative oversight, agency actions, controls on agencies, appeals, adjudications, judicial review, and legal ethics. Specific areas of agency action are explored, such as environmental law, Social Security, civil rights, immigration law, and Workers’ Compensation.
Prerequisites: POL* 120 or eligibility for ENG* 101 or permission of instructor
Offered: Occasionally

LGL* 220: Computer Applications in Law
4 Credits
Formerly LEGL 220
Provides the paralegal student with a background in computer applications in the law office. The student will employ and examine Microsoft Office Suite applications, as well as specialized legal software, to perform billing and calendar functions, file and case management, and litigation support. The student will learn to access public records and governmental information using the Internet. Procedures for electronic filing and access to court forms, docket and calendars will be reviewed. The student will perform legal research using Westlaw and Lexis-Nexis.
Prerequisites: POL* 120 or eligibility for ENG* 101 or permission of instructor. Students without a strong foundation in computer applications should take CSC* 101 or BOT* 230
Offered: Fall

LGL* 240: Legal Studies Capstone Course
3 Credits
Provides students with an opportunity to engage in advanced analysis, research and writing projects, integrating
prior course work and further developing paralegal skills. Students will prepare a portfolio of documents, essays and projects that demonstrate core competencies. Job search strategies and continuing education opportunities will be discussed. Students will prepare for and complete a comprehensive, substantive assessment after review of various content areas.

**Prerequisites:** LGL* 102, LGL* 103, LGL* 208, LGL* 220 and one of the following: BBG* 234 or LGL* 211 or LGL* 212.

**Offered:** Spring

**LGL* 270: Cooperative Education/Work Experience**

3 Credits

(Formerly LEGL 270)

Provides students with the opportunity to apply classroom theory in an actual work setting. Students may be placed in a variety of work settings related to the program of study, including private law firms, corporate legal departments, government or other settings in which practical experience may be gained. In addition to site placement (150 hours for unpaid internships; 300 hours for paid placement), students attend seminars focusing on job-related interpersonal skills, such as values and preferences, time and stress management, communication skills, conflict management, corporate culture, new employee orientation, performance evaluations, business ethics, leadership, and career advancement. Job search strategies are discussed and practiced.

**Prerequisites:** 12 completed credit hours in the Paralegal program and permission of instructor.

**Offered:** Fall, Spring, Summer

**Manufacturing Engineering Technology**

**MFG* 106: Computer-Aided Manufacturing I**

3 Credits

(Formerly CAM 101)

An introductory course in the utilization of computer technology for the planning, implementation and control manufacturing processes. The process of manual and automated preparation of computer-aided manufacturing systems programs and equipment are studied in preparation for implementing these techniques in a computer-integrated manufacturing environment. This will be accomplished through numerical control programming (CNC) and CAD/CAM interface.

**Prerequisites:** MFG* 111, CAD* 110.

**Offered:** Fall

**MFG* 111: Manufacturing Materials and Process I**

3 Credits

(Formerly MFG 111)

An introduction to the basic principles on which manufacturing processes are based, and to the basic materials produced by or used in these processes. Topics include: the basic processes in manufacturing metals, testing or engineering materials; ferrous and non-ferrous metals and alloys; fundamental metal-casting, molding and heat treating processes; non-metallic materials; metal cutting, forming, welding and joining; metal machining processes; and quality control measurement and inspection.

**Prerequisites:** MAT* 138 (may be taken concurrently).

**Offered:** Occasionally

**MFG* 112: Manufacturing Materials and Process II**

3 Credits

(Formerly MFG 112)

A continuation of MFG* 111: Manufacturing Materials and Processes I with emphasis on metal machining and fabrication technologies, numerical control machining, tooling and fixture design and manufacture, and advanced metals machining technologies and concepts.
Prerequisites: MFG* 111.
Offered: Occasionally

MFG* 171: Introduction to Lean Manufacturing
3 Credits
The purpose of this course is to provide the student with the fundamental knowledge of current continuous process improvement methodologies in use today within competitive manufacturing environments. This introductory course will expose the student to the basic concepts of Lean Manufacturing theory and the various tools and techniques involved with a lean implementation. This course will be presented following the lean-six sigma process methodology of DMAIC (Define, Measure, Analyze, Improve, Control) to ensure that at the completion of the course, the student will be competent to participate effectively as a team member in lean implementation projects.

Prerequisites: None
Offered: Fall

MFG* 172: Introduction to Lean Supply Chain Management
3 Credits
The course is an introduction to the basic principles and methodologies of Supply Chain Management. The course reviews the lean manufacturing principles needed to understand and maintain the supply chain. Key concepts are covered such as Value Stream Mapping, customer/supplier roles, supplier types, metrics, quality systems, quality audits, communication, and information flow. Class activities, group assignments, and case studies are emphasized for real-world learning experiences.

Prerequisites: None
Offered: Fall

MFG* 205: Principles of CNC with Mastercam
3 Credits
This course is an introduction to computer numerical control (CNC) programming of 2- and 3-axis machine tools by generating 2D and 3D geometries using Mastercam® software. Topics include an introduction to CNC programming coding, set-up, tooling, operation, and troubleshooting based on industry print standards. Students learn the basic principles and applications of numerically controlled software and hardware and experience the set up and operation of CNC milling machines and lathes.

Prerequisites: MAT* 138 and CAD* 110.
Offered: Spring

MFG* 230: Statistical Process Control
3 Credits
(Formerly QA 100)
An introduction to the concepts of manufacturing statistical process control. Topics include: measures of central tendency, measures of variation, normal distribution theory, process run charts, process control charts for variable and attribute data, normal probability plots, Pareto diagrams and cause and effect diagrams.

Prerequisites: MAT* 165.
Offered: Fall

MFG* 239: Geometric Dimension and Tolerancing
3 Credits
(Formerly ENGR 102)
An intermediate course in the interpretation of engineering drawing beginning with the basics of dimensional tolerances and tolerance systems. Topics include: the mathematics of interpreting and specifying tolerances on dimensions, the system of geometric tolerancing, the basic nomenclature and standard symbols conforming to
ANSI Y14.5M.

**Prerequisites:** EGR* 112

**Offered:** Spring

**MFG* 271: Advanced Lean Manufacturing**

3 Credits

The purpose of this course is to provide the student with the knowledge to implement lean improvements within the production environment using a systematic approach. This course will follow an improvement project (from the student’s current employer or case study) through the five stages of the DMAIC problem solving methodology. At the completion of the course, the student will be competent to effectively lead a lean implementation project within a company.

**Prerequisites:** MFG* 171 or permission of instructor.

**Offered:** Spring

**MFG* 272: Implementation of Lean Supply Chain Management**

3 Credits

The course covers the benefits and elements needed for implementing supply chain management. Team building and communication skills are shown as crucial factors in supply chain management. Topics emphasized in the course are measuring the velocity of the supply chain, developing partnerships, logistics, software tools, hardware, and continuous improvement. Class activities, group assignments and case studies are emphasized for real-world learning experiences.

**Prerequisites:** MFG* 172 or Permission of instructor

**Offered:** Spring

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**Mathematics**

**MAT* 075: Prealgebra: Number Sense & Geometry**

0 Credits

*(Formerly MATH 098)*

This course is designed to enhance the student’s mathematical literacy so that he/she will be prepared to deal effectively with a variety of practical problems. Topics include: interpretation and analysis of charts and graphs; geometry and measurements; estimation and reasonableness of answers, applications using ratios, proportions, percents and decimals; properties of the whole, integer, and rational numbers and operations on the real numbers; and solutions of equations. A review of the operations and fundamental concepts of arithmetic and geometry will be imbedded in and connected to real world problem situations. An e-book and an access code for specialized software is required on the first day of class.

**Prerequisites:** Placement by mathematics assessment test and eligibility for ENG* 066.

**Offered:** Fall, Spring, Summer

**MAT* 095: Elementary Algebra Foundations**

0 Credits

*(Formerly MATH 101)*

The course includes all of the basic properties and theorems of the real number system that are required to solve linear, quadratic and selected rational equations. Linear systems, basic graphing, integer exponents and selected literal equations are included. An e-book and an access code for specialized software is required on the first day of class.

**Prerequisites:** "C" or better in MAT* 075 or placement by mathematics assessment test, and eligibility for ENG* 066.

**Offered:** Fall, Spring, Summer
MAT* 096: Algebraic Concepts, Number Sense & Geometry

0 Credits
(Formerly MATH 100)

This course satisfies the requirements for both MAT* 075 and MAT* 095 in a single semester. The course will provide the student with enhanced mathematical literacy in arithmetic, geometric, and algebraic concepts while strengthening and building problem solving and reasoning skills. Topics include: interpretation and analysis of charts and graphs; geometry and measurements; estimation strategies; ratio and proportion; percents and decimal numbers; properties of the whole numbers, integers, rationals and reals; operations of the real numbers; use of variables, equations and graphs to interpret problems in symbolic form; properties and theorems of the real number systems to solve linear, quadratic, rational, and literal equations; linear systems; and integer exponents. Practical problem applications and graphing calculators will be fully integrated into the course. A TI-83+ or TI-84+ graphing calculator is required for the course. Class: 5 hours per week.

Prerequisites: Placement by mathematics assessment test, and eligibility for ENG* 066. (It is recommended that students consult with either the Mathematics Department or their advisor.)

Offered: Occasionally

MAT* 109: Quantitative Literacy

3 Credits
(Formerly MATH 110)

Selected topics in mathematics chosen to satisfy the General Studies program requirement in mathematics. A course designed to demonstrate the fundamental nature of mathematics and its applications in modern life through an introduction to the concepts of statistics. Topics include random sampling, design of surveys and experiments, information from samples, confidence intervals, elementary probability, examining numbers and data critically, graphing and data analysis, written discussion of numerical analysis, and simulation. A TI-30 XIIs or TI-83+ or TI-84+ graphing calculator is required. Applications considered throughout.

Prerequisites: “C” or better in MAT* 095 or MAT* 096 or placement by mathematics assessment test and eligibility for ENG* 101. May not be taken for credit if credit already received for MAT* 165.

Offered: Fall, Spring

Fulfills General Education - Mode 4


3 Credits
(Formerly MATH 102)

A second course in mathematical modeling course (whose main themes are function represented by tables, graphs and rules) and problem solving. Polynomial functions with special attention to linear and quadratic functions; power functions; square root, absolute value, piecewise and exponential functions are studied. A TI-83+ or TI-84+ graphing calculator is required and used throughout the course.

Prerequisites: “C” or better in MAT* 096 or MAT* 095, or placement by mathematics assessment test and eligibility for ENG* 101. No credit if already completed MAT* 158 or any higher numbered math course.

Offered: Fall, Spring, Summer

Fulfills General Education - Mode 4

MAT* 139: Elementary and Intermediate Algebra Combined

3 Credits

A course in mathematical modeling where the main themes are represented using tables, graphs, algebraic rules, and verbal rules. Topics will include problem solving and practical applications. Basic properties and theorems of the real number system will be used to solve linear, exponential, polynomial, piecewise, and absolute value functions. Properties of exponents will be covered using both integer and rational numbers. Use of the graphing calculator will be integrated throughout the course. This course combines the content of MAT* 095 with MAT* 138 in one semester.

Prerequisites: Placement by mathematics assessment test and eligibility for ENG* 093.
Offered: Occasionally
Fulfills General Education - Mode 4

MAT* 146: Math for Liberal Arts
3 Credits
(Formerly MATH 106)
An introduction to contemporary mathematics for students of science, social science and the liberal arts. Topics may include: sets and deductive reasoning, inductive reasoning, logic, counting techniques, social choice and decision making, management science and the nature of geometry—growth and symmetry. Applications are considered throughout. A TI-83+ or TI-84+ graphing calculator is required.
Prerequisites: “C” or better in MAT* 138 or MAT* 139 or placement by mathematics assessment test, and eligibility for ENG* 101.
Offered: Fall, Spring
Fulfills General Education - Mode 4

MAT* 148: Geometry
3 Credits
(Formerly MATH 109)
A foundation course in Euclidean geometry using an axiomatic approach recommended especially for physical science and engineering majors who have not had a formal geometry course. Topics include: inductive and deductive reasoning; logic; polygons; parallelism; congruence; similarity; coordinate geometry; direct, indirect and coordinate proof; three-dimensional space; and a brief introduction to non-Euclidean geometries. As appropriate, computer software is used to encourage exploration and formulation of hypothesis.
Prerequisites: “C” or better in MAT* 138 or MAT* 139 or “B+” or better in MAT* 096 or MAT* 095 or placement by mathematics assessment test and eligibility for ENG* 101.
Offered: Occasionally
Fulfills General Education - Mode 4

MAT* 158: Functions, Graphs & Matrices
3 Credits
(Formerly MATH 120)
A course in selected topics from contemporary mathematics with applications for students in business, economics, and social science. Topics include: the concepts of function and rate of change, a review of algebraic and graphical aspects of polynomial functions, a study of exponential and logarithmic functions, mathematical modeling, systems of linear equations in 2 or more variables with an emphasis on forming, solving and interpretation of matrices. A TI-83+ or TI-84+ graphing calculator is required and used throughout.
Prerequisites: “C” or better in MAT* 138 or MAT* 139 or “C” or better in both MAT* 095 and MAT* 109, or eligibility for ENG* 101.
Offered: Fall, Spring
Fulfills General Education - Mode 4

MAT* 165: Elementary Statistics with Computer Applications
4 Credits
(Formerly MATH 111)
An introduction to statistical theory and its applications. The use of statistics as a decision-making tool will be discussed. Topics include: data collection, organization and summarization, measures of central tendency and variation, counting techniques, introductory probability theory, discrete and continuous probability models, normal distribution theory, sampling distributions, confidence interval estimation and one sample hypothesis testing. A statistical calculator is required and will be used throughout. Applications of statistical techniques in a variety of disciplines will use the Minitab Statistical Software Package.
Prerequisites: “C” or better in MAT* 138 or MAT* 139 or “C” or better in both MAT* 095 and MAT* 109, or “C” or better in MAT* 096 and MAT* 109, eligibility for ENG* 101.
MAT* 172: College Algebra
3 Credits
This course is a thorough and rigorous treatment of the algebraic skills needed to be successful in the Calculus sequence. The course will cover sets, functions, simplifying expressions, solving equations, linear functions, linear systems, polynomials, exponential functions, logarithmic functions, complex fractions, radical expressions, complex numbers and quadratic functions. Focus will be on gaining proficiency with algebraic skills. A TI-83 or TI-84 graphing calculator is required and used throughout the course.
Prerequisites: “C” or better in MAT* 138 or MAT* 139, or placement by mathematics assessment test, and eligibility for ENG* 101.
Offered: Fall, Spring
Fulfills General Education - Mode 4

MAT* 185: Trigonometric Functions
3 Credits
(Formerly MATH 105)
A brief review of sets, relations, functions, and inverses. Topics include trigonometry of the right triangle, solutions of triangles, the trigonometric functions, the circular functions, identities, solving trigonometric equations, graphs, inverse trigonometric functions, polar coordinates and vectors. Emphasis is on an analytic approach.
Prerequisites: MAT* 138 or MAT* 139 or placement by mathematics assessment test and eligibility for ENG* 101. Recommended: MAT* 148 or high school geometry.
Offered: Fall, Spring
Fulfills General Education - Mode 4

MAT* 186: Precalculus
4 Credits
(Formerly MATH 150)
A detailed study of relations and functions, operations on functions, and their graphs. Characteristics of various families of functions, modeling and solving application problems are the main focus of the course. In particular, exponential, logarithmic and circular functions along with polynomial, rational and selected algebraic families will be developed. This course assumes that the student has had some exposure to geometry. A TI-83+ or TI-84+ or 86 graphing calculator is required and will be used throughout.
Prerequisites: A grade of “C” or better in MAT* 172; “C” or better in MAT* 155, or placement by mathematics assessment test, and eligibility for ENG* 101.
Offered: Fall, Spring, Summer
Fulfills General Education - Mode 4

MAT* 222: Statistics II with Technology Applications
3 Credits
(Formerly MATH 208)
Introduction to statistical research methods with applications to business, economics and social sciences. Emphasis on: statistical inference, hypothesis testing, correlation simple linear regression and multiple regression, analysis of variance, nonparametric methods and Chi-square tests. The statistical software package, Minitab, will be used throughout the course.
Prerequisites: MATH 108 or MAT* 165, eligibility for ENG* 101.
Offered: Occasionally
Fulfills General Education - Mode 4
MAT* 230: Applied Calculus with a Modeling Approach
3 Credits
(Formerly MATH 121)
A course in selected topics from calculus with applications in business, economics, and social science. Students will learn the fundamental concepts of calculus and how to apply them to real-life problems. A major goal is to develop conceptual understanding (rather than algebraic manipulation) through the use of graphing calculators and through the consideration of graphical, numerical and algebraic perspectives. The major conceptual focus is on rates of change and their interpretations within a problem context. The definition of the integral, the Fundamental Theorem of Calculus, some selected applications of integration and some integration techniques are included. A TI-83+ graphing calculator is required and used throughout. Class: 3 hours per week.
Prerequisites: “C” or better in MAT* 158 and eligibility for ENG* 101.
Offered: Fall, Spring
Fulfills General Education - Mode 4

MAT* 242: Projects in Calculus I
1 Credit
(Formerly MATH 188)
A supplemental problem-solving session dominated by problems that will direct attention more to ideas than to techniques. There will be some self-contained examples of applications of calculus that are tractable, relevant and interesting to students. Other problems will require imagination, outside reading and consultation, cooperation and coherent writing. Students will be required to defend both their methodology and their conclusion. Lastly, the readings along with the associated problems from the readings will provide some history of the discipline as well as how mathematics in general and calculus in particular has contributed to intellectual history. May be taken up to two times as MAT* 242 and MAT* 243.
Prerequisites: Concurrent registration in MAT* 254 (formerly MAT* 250) or MAT* 256 and eligibility for ENG* 101.
Offered: Occasionally
Fulfills General Education - Mode 4

MAT* 243: Projects in Calculus II

(Formerly MATH 189)
A supplemental problem-solving session dominated by problems that will direct attention more to ideas than to techniques. There will be some self-contained examples of applications of calculus that are tractable, relevant and interesting to students. Other problems will require imagination, outside reading and consultation, cooperation and coherent writing. Students will be required to defend both their methodology and their conclusion. Lastly, the readings along with the associated problems from the readings will provide some history of the discipline as well as how mathematics in general and calculus in particular has contributed to intellectual history. May be taken up to two times as MAT* 242 and MAT* 243.
Prerequisites: Concurrent registration in MAT* 254 (formerly MAT* 250) or MAT* 256 and eligibility for ENG* 101.
Offered: Occasionally
Fulfills General Education - Mode 4

MAT* 254: Calculus I
4 Credits
(Formerly MAT* 250)
A first course in calculus with analytic geometry for students in mathematics, science, engineering and technology. Topics include families of functions (including exponential and logarithmic) represented by table, graph and equation, modeling of actual data, the concepts of limit and continuity, the derivative and antiderivatives, the definite integral and the Fundamental Theorem of Calculus. Applications from mathematics,
engineering, and economics will receive special attention. Solutions to such problems will require the use of a graphing calculator and/or a symbolic algebra system (Maple). A TI-83+ or TI-84+ or TI-86 graphing calculator is required.

Prerequisites: "C" or better in MAT* 186, or placement by mathematics assessment test, and eligibility for ENG* 101. Students cannot receive credit for MAT* 254 if they have already received credit for MAT* 250.

Offered: Fall, Spring
Fulfills General Education - Mode 4

MAT* 256: Calculus II
4 Credits
(Formerly MATH 192)
A second course in Calculus and analytic geometry for students in mathematics, science, engineering and technology. Topics include antiderivatives, the definite integral, the Fundamental Theorem of Calculus, techniques of integration, numerical approximation, methods of integration, separable differential equations, improper integrals, sequences and series, polar coordinates and parametric equations. Applications of these topics are used throughout the course and will include problems in area, volume, arc length and exponential growth and decay: (Estimation and approximation techniques are considered throughout the course and include methods for approximating solutions to equations, methods of numerical integrations, and the use of power series to approximate functions.) Solutions of these problems will require the use of graphing calculator and/or Maple software. A TI-83+ or TI-84+ or TI-86 graphing calculator is required.

Prerequisites: Eligibility for ENG* 101 and "C" or better in MAT* 254 (formerly MAT* 250).
Offered: Fall, Spring
Fulfills General Education - Mode 4

MAT* 268: Calculus III: Multivariable
4 Credits
(Formerly MATH 293)
A course in multivariable calculus with analytic geometry for students of mathematics, science and engineering. Topics include: parametric equations, two- and three-dimensional vector algebra, vector differential calculus, differentiation of functions of several variables, multiple integrals, and line and surface integrals. Applications are considered throughout. Computer software and/or graphic calculators will be integrated as appropriate throughout the course.

Prerequisites: "C" or better in MAT* 256 and eligibility for ENG* 101.
Offered: Fall, Spring
Fulfills General Education - Mode 4

MAT* 272: Linear Algebra
3 Credits
(Formerly MATH 220)
A first course in linear algebra for students in mathematics, science and engineering. Topics include: systems of linear equations, matrices, determinants, vectors and vector spaces, linear transformations, eigenvalues and eigenvectors. Applications will be considered with emphasis on numerical methods. Computers and/or graphing calculators will be integrated as appropriate.

Prerequisites: "C" or better in MAT* 256 and eligibility for ENG* 101.
Offered: Spring
Fulfills General Education - Mode 4

MAT* 285: Differential Equations
4 Credits
(Formerly MATH 201)
An introductory course in differential equations. Solution methods for differential equations including selected first order equations, nth-order equations, and systems of linear equations using matrix techniques, Laplace
transforms, and numerical methods. Series techniques for selected linear differential equations including Bessel’s equation will be considered. Computer software and/or graphing calculators will be integrated as appropriate throughout the course. Recommended for science and engineering students.

**Prerequisites:** "C" or better in MAT* 256 and eligibility for ENG* 101.

**Offered:** Fall, Spring

**Fulfills General Education - Mode 4**

**MAT* 287: Set Theory and Functions**

3 Credits  
*(Formerly MATH 250)*

A formal introduction to the basic concepts of modern abstract mathematics. Topics include: symbolic logic, sets and relations, recursive and inductive procedures, functions, cardinality, algebraic structures, graph theory, and methods of proof.

**Prerequisites:** "C" or better in MAT* 256 and eligibility for ENG* 101.

**Offered:** Occasionally

**Fulfills General Education - Mode 4**

**Meteorology**

**MET* 101: Meteorology**

3 Credits  
*(Formerly METO 110)*

An introduction to the principles of atmospheric behavior, with emphasis on atmospheric motion, general circulation, air masses and frontal systems, clouds and precipitation, and their relation to climate and weather formations.

**Prerequisites:** Eligibility for ENG* 101

**Offered:** Fall

**Fulfills General Education - Mode 5**

**Music**

**MUS* 101: Music History and Appreciation I**

3 Credits

This course is a survey of western European music from the Medieval Period through Baroque with an emphasis given to stylistic forms (i.e. plainchant, motet, opera fugue), composers (i.e. Palestrina, Corelli, Morley, Vivaldi, Bach, Handel), and the cultural/societal impact on the music. The course will also review the elemental components of music (i.e. pitch, melody, rhythm and harmony).

**Prerequisites:** Eligibility for ENG* 093

**Offered:** Fall

**Fulfills General Education - Mode 1**  
**Fulfills General Education - Knowledge of Human Thought & Expression**

**MUS* 102: Music History and Appreciation II**

3 Credits  
*(Formerly MUS 112)*

A survey of western music from the classical period to modern times with emphasis given to the major music forms (i.e. symphony, concert, art song, opera) of composition as well as pieces that have literary or other non-musical associations. A review of music concepts such as sound, melody, harmony, rhythm and form.

**Prerequisites:** Eligibility for ENG* 093

**Offered:** Spring

**Fulfills General Education - Mode 1**  
**Fulfills General Education - Knowledge of Human Thought & Expression**
MUS* 107: Today's Music
3 Credits
(Formerly MUS 113)
A music appreciation course that examines the development of American music from its roots in Anglo, African, Native and Latin American traditions to the evolved styles of country, blues, folk, rock” n” roll. Emphasis will be given to the impact of these earlier styles on contemporary practices.
Prerequisites: Eligibility for ENG* 093
Offered: Fall
Fulfills General Education - Mode 1
Fulfills General Education - Knowledge of Human Thought & Expression

MUS* 108: Today's Music Gospel, Ragtime, Blues, Jazz
3 Credits
An examination of the development of American music from its roots in the secular and sacred traditions of the late 1800’s and their impact on the pre-jazz forms of ragtime, brass bands, and blues to the jazz forms of swing, bebop, cool and fusion. Emphasis will be given to the stylistic characteristics of each form and their impact on current music styles.
Prerequisites: Eligibility for ENG* 093
Offered: Spring
Fulfills General Education - Mode 1
Fulfills General Education - Knowledge of Human Thought & Expression

MUS* 111: Fundamentals of Music I
3 Credits
(Formerly MUS 211)
As a beginning course in the theory of music, students will be introduced to the skills necessary to read, write and perform music, with basic training in pitch and emphasis on performance. Recommended: basic piano skills.
Prerequisites: None
Offered: Fall,Spring

MUS* 124: Music of the Classical Period
3 Credits
(Formerly MUS 251)
A study of Western European music development from the early 18th century to the early 19th century. Topics will include: an overview of the transitional pre-classical period and it’s impact on the music and composers of the classical period, an analysis of the significant musical styles of the period, a biographical study of the key composers and the impact of the culture on the music development of the period.
Prerequisites: Eligibility for ENG* 101, "C" or better in MUS* 101. Highly recommended: MUS* 101.
Offered: Fall
Fulfills General Education - Mode 1

MUS* 141: Beginning Guitar
3 Credits
(Formerly MUS 216)
Jazz and Rock techniques for the beginning player. Emphasis on correct tuning, chord construction, scales, rhythm, and group performance.
Prerequisites: None
Offered: Fall,Spring
Fulfills General Education - Mode 1
MUS* 148: Beginning Piano
3 Credits
(Formerly MUS 215)
Students will be introduced to the piano keyboard and will acquire basic skills in reading general music notation, music notation related to the piano and an understanding and application of basic chords. Students will also receive a foundation in music theory and appreciation. Highly recommended for Music Option students needing basic piano skills for MUS* 111.
Prerequisites: None
Offered: Fall, Spring
Fulfills General Education - Mode 1

MUS* 149: Beginning Jazz Concepts
3 Credits
This course is a preparatory course for students interested in performing jazz. Students will acquire an understanding and skill development in the areas of basic jazz forms, rhythmic concepts and harmonic structures as it applies to the performance of jazz on their respective instruments/voices. Students will gain knowledge of significant jazz artists of diverse styles and acquire skills in performing a jazz solo over harmonic progressions as a soloist or within an ensemble setting.
Prerequisites: MUS* 111: Fundamentals of Music I with a C or above or with permission of the instructor.

MUS* 151: Class Piano II
3 Credits
A course designed for students who already demonstrated basic piano skills. Students will gain further knowledge of piano technique and related theory concepts, utilizing compositions from popular and classical repertoire.
Prerequisites: "C" or better in MUS* 148 or permission of instructor.
Offered: Spring

MUS* 158: Chamber Music/Jazz Ensemble I
2 Credits
(Formerly MUS 123)
The course is performance-based. During the 3 hour class students are divided into 3 groups of classical, jazz and piano. Each group prepare musical selections from standard repertoire to perform at the end of the semester. Instrumental performing groups of various kinds and sizes, depending on the students enrolled. Course may be repeated up to four semesters as MUS* 158, MUS* 159, MUS* 258, MUS* 259. Students must demonstrate technical proficiency on their instrument.
Prerequisites: None
Offered: Fall, Spring
Fulfills General Education - Mode 1

MUS* 159: Chamber Music/Jazz Ensemble II
2 Credits
(Formerly MUS 124)
The course is performance-based. During the 3 hour class students are divided into 3 groups of classical, jazz and piano. Each group prepare musical selections from standard repertoire to perform at the end of the semester. Instrumental performing groups of various kinds and sizes, depending on the students enrolled. Course may be repeated up to four semesters as MUS* 158, MUS* 159, MUS* 258, MUS* 259. Students must demonstrate technical proficiency on their instrument.
Prerequisites: None
Offered: Fall, Spring
MUS* 160: Beginning Voice  
3 Credits  
A performance-based course designed to introduce vocal technique, Italian/English classical and Broadway song repertoire and performance practices to individuals seeking vocal instruction.  
Prerequisites: None  
Offered: Fall, Spring  

MUS* 161: Chorale I  
2 Credits  
(Formerly MUS 121)  
Open to all students and members of the college community who have had prior experience singing in school, church, or community choral ensembles. Extensive choral experience is not required but an ability to match a musical pitch and sing a melody is essential. Course may be repeated up to four semesters as MUS* 161, MUS* 162, MUS* 270, MUS* 271.  
Prerequisites: None  
Offered: Fall, Spring  
Fulfills General Education - Mode 1  

MUS* 162: Chorale II  
2 Credits  
(Formerly MUS 122)  
Open to all students and members of the college community who have had prior experience singing in school, church, or community choral ensembles. Extensive choral experience is not required but an ability to match a musical pitch and sing a melody is essential. Course may be repeated up to four semesters as MUS* 161, MUS* 162, MUS* 270, MUS* 271.  
Prerequisites: None  
Offered: Fall, Spring  

MUS* 174: Madrigal/Chamber Singer I  
1 Credits  
(Formerly MUS 127)  
This course is designed to rehearse and perform sacred and secular music written for the smaller vocal group. Unlike Chorus, an audition is necessary to prepare the singer for the increased difficulty of the musical material in this course. Course may be taken for a total of 4 credits as MUS* 174, MUS* 175, MUS* 275, and MUS* 276. Class: 1.5 hours per week.  
Prerequisites: None  
Offered: Occasionally  
Fulfills General Education - Mode 1  

MUS* 175: Madrigal/Chamber Singer II  
1 Credits  
(Formerly MUS 128)  
This course is designed to rehearse and perform sacred and secular music written for the smaller vocal group. Unlike Chorus, an audition is necessary to prepare the singer for the increased difficulty of the musical material in this course. Course may be taken for a total of 4 credits as MUS* 174, MUS* 175, MUS* 275, and MUS* 276. Class: 1.5 hours per week.  
Prerequisites: None  
Offered: Occasionally
MUS* 185: Applied Lessons I
1 Credits
Private vocal or instrumental lessons. Students in this course will meet as a class on a weekly basis to learn and put into practice various elements of performance. Weekly one hour private vocal or instrumental lessons are also required. Private teacher must be approved by the Liberal Arts Division. Fees for lessons are in addition to regular tuition and are arranged between the student and teacher. Class: One hour per week in addition to one hour of private music instruction per week. Course may be taken for a total of 4 credits as MUS* 185, MUS* 186, MUS* 285 and MUS* 286.
Prerequisites: None
Offered: Fall, Spring

MUS* 186: Applied Lessons III
1 Credits
Private vocal or instrumental lessons. Students in this course will meet as a class on a weekly basis to learn and put into practice various elements of performance. Weekly one hour private vocal or instrumental lessons are also required. Private teacher must be approved by the Liberal Arts Division. Fees for lessons are in addition to regular tuition and are arranged between the student and teacher. Class: One hour per week in addition to one hour of private music instruction per week. Course may be taken for a total of 4 credits as MUS* 185, MUS* 186, MUS* 285 and MUS* 286.
Prerequisites: None
Offered: Fall, Spring

MUS* 215: Music Harmony
4 Credits
A continuation of fundamentals introducing the study and practice of tonal writing, principles of voice leading, writing in the traditional style with an emphasis on harmonic/melodic relationships.
Prerequisites: "C" or better in MUS* 111 or permission of instructor.
Offered: Spring

MUS* 216: Contemporary Music Theory and Application
3 Credits
A continuation of fundamentals. Continued analysis and application of major and minor key harmony. Introduction to modal interchange, sub-dominant minor harmony and chord scale theory. A review of melodic construction and melody and harmony relationship. The course is geared towards the study of contemporary styles such as jazz, pop, rock, R n' B, and Blues.
Prerequisites: "C" or better in MUS* 111 or permission of instructor.
Offered: Fall

MUS* 217: Music Ear Training
3 Credits
This course is designed to assist students in developing skills and techniques for sight singing notated music without the aid of a pitched source (i.e., piano, or melody instrument.) Specific areas of focus will include: aural skill development through music dictation, interval singing, scale singing and chord singing. Students will develop techniques for improving the accuracy of their pitch intonation. The course will also provide opportunities for students to integrate these skills into their: individual and group music practice, understanding of music theory, ability to hear different types of music harmonies and singing (i.e., part singing, ensemble singing and singing to instrumental accompaniment.)
Prerequisites: C or better in MUS* 111
Offered: Spring
MUS* 218: Electronic Music Composition I  
3 Credits  
(Formerly MUS 241)  
The study of contemporary electronic music composition, technique, performance, and recording using synthesis, computer, sequencing and recording technology.  
Prerequisites: None  
Offered: Fall, Spring

MUS* 219: Electronic Music Composition II  
3 Credits  
A continuation of MUS* 218, Electronic Music Composition I. This course is an exploration of techniques used in electronic music composition. Topics covered include: further exploration in the editing of digital recording using industry standard sequencing software; the mix, mastering and exporting of digital recordings; and the composition of a music score for a video. Students will also be introduced to the various aspects of operating a recording studio which will include the type and function of equipment used and business requirements.  
Prerequisites: MUS* 218 or permission of instructor.  
Offered: Spring

MUS* 258: Chamber Music/Jazz Ensemble III  
2 Credits  
(Formerly MUS 223)  
The course is performance-based. During the 3 hour class students are divided into 3 groups of classical, jazz and piano. Each group prepare musical selections from standard repertoire to perform at the end of the semester. Instrumental performing groups of various kinds and sizes, depending on the students enrolled. Course may be repeated up to four semesters as MUS* 158, MUS* 159, MUS* 258, MUS* 259. Students must demonstrate technical proficiency on their instrument.  
Prerequisites: None  
Offered: Fall, Spring

MUS* 259: Chamber Music/Jazz Ensemble IV  
2 Credits  
(Formerly MUS 224)  
The course is performance-based. During the 3 hour class students are divided into 3 groups of classical, jazz and piano. Each group prepare musical selections from standard repertoire to perform at the end of the semester. Instrumental performing groups of various kinds and sizes, depending on the students enrolled. Course may be repeated up to four semesters as MUS* 158, MUS* 159, MUS* 258, MUS* 259. Students must demonstrate technical proficiency on their instrument.  
Prerequisites: None  
Offered: Fall, Spring

MUS* 270: Chorale III  
2 Credits  
(Formerly MUS 221)  
Open to all students and members of the college community who have had prior experience singing in school, church, or community choral ensembles. Extensive choral experience is not required but an ability to match a musical pitch and sing a melody is essential. Course may be repeated up to four semesters as MUS* 161, MUS* 162, MUS* 270, MUS* 271.  
Prerequisites: None  
Offered: Fall, Spring
MUS* 271: Chorale IV
2 Credits
(Formerly MUS 222)
Open to all students and members of the college community who have had prior experience singing in school, church, or community choral ensembles. Extensive choral experience is not required but an ability to match a musical pitch and sing a melody is essential. Course may be repeated up to four semesters as MUS* 161, MUS* 162, MUS* 270, MUS* 271.
Prerequisites: None
Offered: Fall, Spring

MUS* 275: Madrigal/Chamber Singer III
1 Credit
(Formerly MUS 227)
This course is designed to rehearse and perform sacred and secular music written for the smaller vocal group. Unlike Chorus, an audition is necessary to prepare the singer for the increased difficulty of the musical material in this course. Course may be taken for a total of 4 credits as MUS* 174, MUS* 175, MUS* 275, and MUS* 276. Class: 1.5 hours per week.
Prerequisites: None
Offered: Occasionally

MUS* 276: Madrigal/Chamber Singer IV
1 Credit
(Formerly MUS 228)
This course is designed to rehearse and perform sacred and secular music written for the smaller vocal group. Unlike Chorus, an audition is necessary to prepare the singer for the increased difficulty of the musical material in this course. Course may be taken for a total of 4 credits as MUS* 174, MUS* 175, MUS* 275, and MUS* 276. Class: 1.5 hours per week.
Prerequisites: None
Offered: Occasionally

MUS* 277: Vocal: Opera to Broadway
3 Credits
A performing ensemble course. Students will research and perform several scenes from musical theater, operetta and operatic repertoire in a live production.
Prerequisites: MUS* 160 or MUS* 161 or MUS* 174 or permission by instructor.
Offered: Fall, Spring

MUS* 285: Applied Lessons III
1 Credit
Private vocal or instrumental lessons. Students in this course will meet as a class on a weekly basis to learn and put into practice various elements of performance. Weekly one hour private vocal or instrumental lessons are also required. Private teacher must be approved by the Liberal Arts Division. Fees for lessons are in addition to regular tuition and are arranged between the student and teacher. Class: One hour per week in addition to one hour of private music instruction per week. Course may be taken for a total of 4 credits as MUS* 185, MUS* 186, MUS* 285 and MUS* 286.
Prerequisites: None
Offered: Fall, Spring
MUS* 286: Applied Lessons IV
1 Credits
Private vocal or instrumental lessons. Students in this course will meet as a class on a weekly basis to learn and put into practice various elements of performance. Weekly one hour private vocal or instrumental lessons are also required. Private teacher must be approved by the Liberal Arts Division. Fees for lessons are in addition to regular tuition and are arranged between the student and teacher. Class: One hour per week in addition to one hour of private music instruction per week. Course may be taken for a total of 4 credits as MUS* 185, MUS* 286, MUS* 285 and MUS* 286.
Prerequisites: None
Offered: Fall, Spring

Occupational Therapy Assistant

OTA* 102: Foundation of Occupational Therapy
3 Credits
(Formerly OTA 101)
An overview of occupational therapy that describes the philosophy and theoretical foundation of the profession as well as the role of the occupational therapy assistant. Level I, observational experiences will be required.
Prerequisites: None
Offered: Fall

OTA* 120: Neurologic Intervention in Occupational Therapy
4 Credits
(Formerly OTA 120)
A study of the human nervous system with a focus on sensory and motor behavior. The lab is a focus on anatomy and physiology including assessment of function. Prerequisite: concurrently or after OTA* 102 and the biology requirement. Class: 3 hours per week. Laboratory: 2 hours per week.
Prerequisites: Concurrently or after OTA* 102 and the biology requirement.
Offered: Fall

OTA* 206: Level I Advanced Fieldwork
0 Credits
(Formerly OTA 106)
A pass/fail course providing 20 hours of supervised fieldwork experience where the student applies treatment learned in OTA courses and learns about the roles of other professionals involved in patient treatment.
Prerequisites: OTA* 102, OTA* 120, BIO* 115, PSY* 201. To be taken concurrent with OTA* 210, OTA* 212, OTA* 214 and OTA* 232.
Offered: Spring

OTA* 208: Healthcare Management in Occupational Therapy
3 Credits
Explores the roles of the OTA in healthcare delivery, with an emphasis on ethics, standards of practice, professional behavior, certification/licensure, emerging areas of practice, evidence based practice and the healthcare team role delineation.
Prerequisites: None
Offered: Spring

OTA* 210: Occupational Therapy Practice in Pediatrics
3 Credits
(Formerly OTA 102)
An overview of disabilities and diseases that affect children, and the study of occupational therapy theory and
practice as it pertains to the treatment of these disabilities.

**Prerequisites:** OTA* 102 and OTA* 120, BIO* 115, and PSY* 201.

**Offered:** Spring

**OTA* 210L: Occupational Therapy Practice in Pediatrics Lab**

1 Credits  
*(Formerly OTA 102L)*

A laboratory course in occupational therapy to complement OTA* 210; must be taken concurrently with OTA* 210. Laboratory: 2 hours per week.

**Prerequisites:** None

**Offered:** Spring

**OTA* 216: Occupational Therapy Practice in Physical Dysfunction**

3 Credits

The study of Occupational Therapy theory and practice as it pertains to the treatment of disabilities and diseases commonly treated by occupational therapy practitioners in the physical rehabilitation setting.

**Prerequisites:** None

**Offered:** Spring

**OTA* 216L: Occupational Therapy Practice in Physical Dysfunction Lab**

1 Credits

Exploration of Occupational Therapy assessments, techniques, interventions and approaches utilized within the practice area of physical disability. Laboratory: 2 hours per week.

**Prerequisites:** None

**Offered:** Spring

**OTA* 218: Occupational Therapy Practice in Mental Health**

3 Credits

The study of Occupational Therapy theory and practice as it pertains to psychiatric diagnoses, and the impact of such upon one’s occupational functioning.

**Prerequisites:** None

**Offered:** Spring

**OTA* 218L: Occupational Therapy Practice in Mental Heath Lab**

3 Credits

Exploration of Occupational Therapy assessments, techniques, interventions and approaches utilized within the practice area of Mental Health. Laboratory: 2 hours per week.

**Prerequisites:** None

**Offered:** Spring

**OTA* 234: Documentation in Occupational Therapy**

3 Credits

This course develops an understanding of, and provides opportunities for, the student to become proficient in the various styles and formats of clinical documentation. Students will develop the ability to construct and revise treatment goals and formulate treatment plans employing various styles utilized within the medical profession.

**Prerequisites:** None

**Offered:** Fall
OTA* 242: Level II Fieldwork
11 Credits
(Formerly OTA 242)
Sixteen weeks of clinical training under the direction of an occupational therapy practitioner. Half the training deals with psychosocial dysfunction and half with physical disabilities.
Prerequisites: Completion of all OTA and general education course work, and Level I Advanced Fieldwork.
Offered: Fall, Spring

OTA* 244: Clinical Seminar in Occupational Therapy
1 Credit
(Formerly OTA 244)
The study of occupational therapy treatment principles and applications using the single case model; to be taken concurrently with OTA* 242.
Prerequisites: Completion of all OTA and general education course work, and Level I Advanced Fieldwork.
Offered: Fall, Spring

Oceanography

OCE* 101: Introduction to Oceanography
3 Credits
(Formerly OCEN 110)
An introduction to the science of the ocean with emphasis on the geological, physical, chemical and biological aspects of oceans. Topics include physical and chemical properties of seawater, circulation, bathymetry, waves, tides, El Niño, and marine plant and animal habitats. A field trip may be included.
Prerequisites: Eligibility for ENG* 101.
Offered: Fall, Spring
Fulfills General Education - Mode 5

Philosophy

PHL* 101: Introduction to Philosophy
3 Credits
(Formerly PHIL 201)
Development of personal views on the fundamental issues of human existence: the nature of reality, the nature of the human person, knowing and thinking, freedom, basis of morality, aesthetics, the philosophical basis of political systems, and God’s existence.
Prerequisites: Eligibility for ENG* 101.
Offered: Fall, Spring, Summer
Fulfills General Education - Mode 3
Fulfills General Education - Knowledge of Human Thought & Expression

PHL* 103: Who Are We?: Theories of Human Nature
3 Credits
An introductory level philosophy course, designed for students who have no experiences in philosophic studies. The course deals with a wide range of philosophic issues organized thematically with particular emphasis placed on the study of major theories of Human Nature: ancient religious traditions, classic philosophical systems, contemporary theories that use scientific method to understand human nature.
Prerequisites: None
Offered: Fall, Spring
Fulfills General Education - Mode 3
PHL* 106: Great Human Ideas: Truth, Goodness, Beauty, Liberty, Equality, and Justice
3 Credits
An introductory level philosophy course, exploring some of great philosophic ideas which have had enduring impact on human and human societies. The course is organized in three parts: 1. What is philosophy? 2. The Ideas We Judge by; 3. The Ideas We Act on. The first part is a general introduction to philosophy for students who have no experiences in philosophical studies, the second part discusses in depth ideas of Truth, Goodness, and Beauty, and in the third part, Liberty, Equality, and Justice.
Prerequisites: Eligibility for ENG* 101.
Offered: Fall, Spring
Fulfills General Education - Mode 3

PHL* 111: Ethics
3 Credits
(Formerly PHIL 203)
The fundamentals and principles of ethics: moral conscience, good and evil, values, norms, ethical judgment, major ethical systems, punishment, religion and ethics. Contemporary problems with case studies; in particular, issues of environmental and bio-medical ethics.
Prerequisites: Eligibility for ENG* 101.
Offered: Fall, Spring, Summer
Fulfills General Education - Mode 3
Fulfills General Education - Knowledge of Human Thought & Expression

PHL* 112: Medical Ethics
3 Credits
(Formerly PHIL 213)
This course relates specific health experiences and issues to ethical theories of traditional and contemporary philosophy. It includes a critical examination of current opinions on moral issues in health care and gives a fair consideration of those views.
Prerequisites: None
Offered: Spring

PHL* 115: Business Ethics
3 Credits
(Formerly PHL 115)
This course will examine the full extent of the relationship between business and ethics: The philosophical foundation for capitalism will be examined as will the application of ethical values and principles to employee/employer interactions.
Prerequisites: Students are strongly urged to take PHL* 101 or the equivalent; or any 100 or 200 level English course to prepare for this course.
Offered: Occasionally
Cross listed as: BBG* 240

PHL* 131: Logic
3 Credits
(Formerly PHIL 205)
Logic is the study of sound reasoning. Areas of concern include practical logic, deduction, induction, and symbolic logic. Focus is upon the application of logical distinctions to rational argument, fallacies, definition, and generally to scientific method. Recommended for all students.
Prerequisites: Eligibility for ENG* 101.
Offered: Fall, Spring
Fulfills General Education - Mode 3
PHL* 151: World Religions
3 Credits
(Formerly PHIL 207)
Survey of the major religions of the world: Christianity, Judaism, Islam, Buddhism and Hinduism, with emphasis on essential doctrines and practices. A review of contemporary cults and sects.
Prerequisites: None
Offered: Fall, Spring
Fulfills General Education - Mode 3

PHL* 153: Buddhist Philosophy
3 Credits
(Formerly PHIL 227)
An examination of the predominant philosophical themes in divergent traditions of Buddhism. Some topics to be covered are metaphysics, ethics, aesthetic concepts, and the Buddhist values for confronting contemporary problems. Recommended for all students.
Prerequisites: None
Offered: Occasionally
Fulfills General Education - Mode 3

PHL* 163: Chinese Philosophy
3 Credits
(Formerly PHIL 211)
An inquiry into the concept of order and harmony in Chinese philosophy. Readings in English translation will include both primary texts and contemporary analyses of materials from Confucianism, Taoism, and other Chinese philosophic schools. Recommended for all students.
Prerequisites: None
Offered: Occasionally
Fulfills General Education - Mode 3

PHL* 197: Philosophy of Sports
3 Credits
This is an advanced philosophy course designed to illustrate the point that philosophical reflection is present in our daily experiences, which we may consider nonintellectual. This course will take up the related themes of sports, athletics, and play, in order to show that an adequate understanding of them requires philosophical understanding. Topics will include the social significance of sports, ethical issues in sports, sports and race, mind and body in sports, sports and aesthetics, gender in sports. Advanced reading and writing skills will help to succeed in this course. Taking a lower level philosophy course or ENG* 101 would be helpful before taking this course.
Prerequisites: Eligibility for ENG* 101
Offered: Occasionally

PHL* 201: Reading Plato’s Republic
3 Credits
This course is an upper level course and designed to help students read original philosophic literature. In this course, students will explore Plato’s Republic, which is the first, and arguably the most influential, work in the history of Western political philosophy.
Prerequisites: Any 100-level philosophy course or ENG* 101.
Offered: Spring
PHL* 211: Reading Aristotle: The Ethics of Happiness
3 Credits
This is an advanced philosophy course prepared for students proficient in reading and writing. The course focuses on the study of views of Aristotle about mortality by means of a careful reading of his Nicomachean Ethics. The goal of the course is to present his ideas clearly and to suggest ways in which the thought of a philosopher from so long ago still bears tremendous relevance for our own age.
Prerequisites: None
Offered: Spring
Fulfills General Education - Mode 3

Physical Therapist Assistant

PTA* 120: Introduction to Physical Therapy
3 Credits
(Formerly PT 101)
Learning opportunities in this course assist the student to recognize the roles of physical therapy within various practice settings. Students differentiate functions of physical therapists and physical therapist assistants as members of the health care team through study of documentation principles, ethics, laws and organizations important to the provision of services. Learning also includes development of knowledge and abilities within the domains of conduct, communication and sensitivity to individual and cultural differences.
Prerequisites: Admission to the PTA* Program.
Offered: Spring

PTA* 125: Physical Therapy for Function
4 Credits
(Formerly PT 102)
This course provides the student with introductory concepts and techniques for effective patient teaching and physical therapy intervention for function and mobility. Emphasis is placed on competence in problem-solving and the physical therapist assistant’s role in modification of physical therapy interventions.
Prerequisites: Admission to the PTA* Program.
Offered: Spring

PTA* 220: Introduction to the Physical Therapy Clinic
1 Credits
(Formerly PT 106)
This course provides an orientation to the physical therapy clinic and to the provision of physical therapy interventions. Students develop communication, intervention, and problem-solving techniques within the physical therapy clinic.
Prerequisites: PTA* 120 and PTA* 125 with a grade of “C” or higher.
Offered: Summer

PTA* 230: Physical Agents in Physical Therapy
4 Credits
(Formerly PT 110)
This course develops the student’s competence with problem-solving and application of physical therapy interventions using physical agents, including therapeutic applications of heat, cold, water, electricity, light and mechanical forces or devices.
Prerequisites: PTA* 120 and PTA* 125 with a grade of “C” or higher, PTA* 220 with a grade of “P”.
Offered: Fall
PTA* 235: Kinesiology For Rehabilitation
4 Credits
(Formerly PT 111)
This course fosters learning of the anatomical and biomechanical principles of human movement through the study of the musculoskeletal and nervous systems. Competencies attained include accurate data collection by goniometry, manual muscle testing, posture and gait analysis including the effects of biomechanical forces on the human body.
Prerequisites: PTA* 120 and PTA* 125 with a grade of “C” or higher, PTA* 220 with a grade of “P”.
Offered: Fall

PTA* 250: Therapeutic Exercise
5 Credits
(Formerly PT 201)
Learning includes the theory and techniques to safely and effectively implement therapeutic exercise interventions based on a plan of care established by a physical therapist. Students also develop competence to measure a patient’s response to interventions and respond accordingly and to provide effective instruction to patients and caregivers.
Prerequisites: PTA* 230 and PTA* 235 with a grade of “C” or higher.
Offered: Spring

PTA* 253: Pathophysiology for Rehabilitation
3 Credits
(Formerly PT 202)
This course develops comprehension about abnormalities and the physical, physiological and psychological changes that occur throughout the human lifespan. The student learns the effects of pathology on the rehabilitation of patients with orthopedic, neurological, and general medical conditions.
Prerequisites: PTA* 230 and PTA* 235 with a grade of “C” or higher.
Offered: Spring

PTA* 258: PTA in the Healthcare Arena
2 Credits
(Formerly PT 210)
This course develops the student’s ability to apply physical therapy interventions and data collection techniques within the clinic environment and advances the student’s abilities with communication, conduct and problem-solving within the structure of the health care system.
Prerequisites: PTA* 230 and PTA* 235 with a grade of “C” or higher.
Offered: Spring

PTA* 260: Physical Therapy Seminar
2 Credits
(Formerly PT 211)
In this pass/fail course students demonstrate the ability to apply principles of problem solving to selected professional issues, industry trends, and special populations that may be encountered as a physical therapist assistant. Learning opportunities assist in the transition from student to clinician and identification of interest areas for lifelong learning.
Prerequisites: PTA* 250, PTA* 253 and PTA* 258 with a grade of “C” or higher.
Offered: Fall
PTA* 262: PTA Internship II
5 Credits
(Formerly PT 212)
Within this clinic-based, pass/fail course students learn to integrate and apply physical therapy concepts and to effectively perform physical therapy interventions as a physical therapist assistant. Students develop their abilities for daily organization and management of a patient caseload and effectively contribute to the health care team.
Prerequisites: PTA* 250, PTA* 253 and PTA* 258 with a grade of “C” or higher.
Offered: Fall

PTA* 265: PTA Internship III
5 Credits
(Formerly PT 213)
Within this clinic-based, pass/fail course students learn to problem-solve and competently function in the clinic environment as a physical therapist assistant. Students develop competence with time management, clinical prioritization and the entry-level abilities of the physical therapist assistant prior to course completion.
Prerequisites: PTA* 250, PTA* 253 and PTA* 258 with a grade of “C” or higher.
Offered: Fall

Physics

PHY* 110: Introductory Physics
4 Credits
(Formerly PHYS 110)
An introductory course in the physics of motion, heat, sound, electricity, magnetism, light, optics and the theory of the atom. Intended for non-science majors. A process oriented laboratory approach emphasizing exploration and problem solving. This course is intended for students who need only one semester of physics. Students with credit for high school physics should elect PHY* 121 or PHY* 221. Scientific calculator required. Class: 3 hours per week. Laboratory: 2 hours per week.
Prerequisites: MAT* 095 or math placement test. Students who have taken a higher level physics course will not receive credit for this course.
Offered: Fall, Spring, Summer
Fulfills General Education - Mode 5

PHY* 121: General Physics I
4 Credits
(Formerly PHYS 121)
Basic concepts of mechanics and heat, including forces, work and energy, conservation laws, physics of fluids, temperature, heat transfer and the laws of thermodynamics. Students who need only one semester of physics should elect PHY* 110. A TI-83+ or TI-84+ or TI-86+ graphing calculator required. Class: 3 hours per week. Laboratory 3 hours per week.
Prerequisites: MAT* 185 or MAT* 186. Students who have taken a higher level physics course will not receive credit for this course.
Offered: Fall
Fulfills General Education - Mode 5

PHY* 122: General Physics II
4 Credits
(Formerly PHYS 122)
Basic concepts of electricity, magnetism and wave motion, including electric and magnetic fields, electromagnetic radiation, wave properties of light and optics. A TI-83+ or TI-84+ or TI-86+ graphing calculator required. Class: 3 hours per week. Laboratory 3 hours per week.
Prerequisites: PHY* 121. Students who have taken a higher level physics course will not receive credit for this course.

Offered: Spring
Fulfills General Education - Mode 5

PHY* 221: Calculus-Based Physics I
4 Credits
(Formerly PHYS 131)
A study of Newtonian mechanics and thermodynamics intended for physics, chemistry, engineering and math transfer students. Topics include particle and rigid body dynamics, work, momentum and energy conservation, gravitation, fluids, heat, and the laws of thermodynamics. A TI-83+ or TI-84+ or TI-86+ graphing calculator or its equivalent is required. Class: 3 hours per week. Laboratory: 3 hours per week.
Prerequisites: Successful completion of MAT* 254 (formerly MAT* 250), and PHY* 110 (or successful completion of one year of high school physics).

Offered: Fall, Spring
Fulfills General Education - Mode 5

PHY* 222: Calculus-Based Physics II
4 Credits
(Formerly PHYS 132)
A study of electricity, magnetism, waves, and optics intended for physics, chemistry, engineering and math transfer students. Topics include Coulomb’s Law, electric and magnetic fields, Gauss’ Law, electric potential, capacitance, Ohm’s Law, dc and ac circuits, induced emf; inductance, simple harmonic motion, wave properties for sound and light, and geometrical optics. A TI-83+ or TI-84+ or TI-86+ graphing calculator or its equivalent is required. Class: 3 hours per week. Laboratory: 3 hours per week.
Prerequisites: Successful completion of PHY* 221 and MAT* 256.

Offered: Fall, Spring
Fulfills General Education - Mode 5

PHY* 223: Calculus-Based Physics III
4 Credits
(Formerly PHYS 133)
Intended for physics, engineering and math transfer majors. Principles of quantum radiation and modern physics, including electromagnetic waves, relativistic mechanics, and quantized radiation are studied. A TI-83+ or TI-84+ or TI-86+ graphing calculator required. Class: 3 hours per week. Laboratory: 3 hours per week.
Prerequisites: PHY* 222, MAT* 268 (may be taken concurrently)

Offered: Occasionally

Political Science

POL* 101: Introduction to Political Science
3 Credits
(Formerly PLSC 101)
The study of politics through the identification of great political issues that are analyzed from historical and philosophical viewpoints.
Prerequisites: Eligibility for ENG* 101.

Offered: Fall
Fulfills General Education - Mode 6
Fulfills General Education - Knowledge of Human Expressions & Behavior
POL* 102: Introduction to Comparative Politics
3 Credits
This course focuses on the governments and peoples of the major regions of the world: Europe, Africa, the Middle East, Asia, and the Americas. It examines global variations in governing structures due to historic, cultural, religious, economic, and other causes. Issues of Third World democratization, economic globalization, Islam and democracy’s “clash of civilizations,” authoritarian states, and other timely issues will be subjects of class discussions and course papers.
Prerequisites: Eligibility for ENG* 101.
Offered: Occasionally
Fulfills General Education - Mode 6

POL* 103: Introduction to International Relations
3 Credits
(Formerly PLSC 102)
An examination of the international community, emphasizing theory and practice in international politics.
Prerequisites: Eligibility for ENG* 101.
Offered: Spring
Fulfills General Education - Mode 6

POL* 111: American Government
3 Credits
(Formerly PLSC 111)
A study of the American political system at the national level, with emphasis on political dynamics and public policy.
Prerequisites: Eligibility for ENG* 101.
Offered: Fall, Spring, Summer
Fulfills General Education - Mode 6
Fulfills General Education - Knowledge of Human Expressions & Behavior

POL* 112: State and Local Government
3 Credits
(Formerly PLSC 112)
The forms, functions, processes and problems of state and local government in the United States, with special emphasis on Connecticut state government.
Prerequisites: Eligibility for ENG* 101.
Offered: Fall, Spring, Summer
Fulfills General Education - Mode 6

POL* 120: Introduction to Law
3 Credits
(Formerly PLSC 120)
This course serves as an introduction to the study of law with an overview of fundamental concepts and principles of our legal system. A variety of legal topics, terminology, and areas of law are discussed in order to assist students in acquiring an appreciation of the dynamic role of law in our changing society. Students are introduced to the roles of legal professionals, including paralegals. Legal reasoning, legal ethics, and legal research methods are also presented.
Prerequisites: Eligibility for ENG* 101 or permission of instructor.
Offered: Fall, Spring
Cross listed as: LGL* 101
POL* 212: Constitutional Law and Civil Rights
3 Credits
(Formerly PLSC 212)
An examination of the United States Constitution as it applies to police power and landmark decisions of the United States Supreme Court interpreting and defining police power.
Prerequisites: POL* 111 or POL* 112.
Offered: Fall, Spring

POL* 293: Connecticut Legislative Internship
6 Credits
(Formerly PLSC 280)
Spring semester only. Students must apply in October. Selected students will spend two days per week interning at the State Capitol. Interns will be prepared to perform the following services for legislators: bill analysis and tracking, spot research, drafting news releases, and constituent casework.
Prerequisites: POL* 111 or POL* 112.
Offered: Spring

Polysomnography

PSG* 101: Polysomnography I
2 Credits
This course is designed to provide didactic instruction for entry-level personnel in the basics of polysomnographic technology. Students will become familiar with terminology, instrumentation, setup and calibration, patient safety and infection control, recording and monitoring techniques, and documentation.
Prerequisites: Acceptance into the Polysomnography Certificate program
Offered: Fall

PSG* 102: Polysomnography Lab I
1 Credits
This course is designed to provide laboratory training for entry-level personnel in the basics of polysomnographic technology. Students will become familiar with terminology, instrumentation, setup and calibration, patient safety and infection control, recording and monitoring techniques, documentation, and patient-technologist interactions related to polysomnography technology.
Prerequisites: Acceptance into the Polysomnography Certificate program
Offered: Fall

PSG* 150: Polysomnography Clinical I
2 Credits
A heath-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision will be provided by clinical professionals.
Prerequisites: Acceptance into the Polysomnography Certificate program
Offered: Fall

PSG* 201: Polysomnography II
2 Credits
This course is designed to provide didactic instruction for entry-level personnel in the basics of polysomnographic technology. Students will become familiar with EMG and EEG recording and monitoring techniques, scoring of LRS and PLMS, performing and scoring MSLT and MWT, mask fitting, PAP equipment and its therapeutic application, pediatric sleep studies, and documentation.
Prerequisites: PSG* 101, PSG* 102 and PSG* 150 all with a "C" or better
Offered: Spring
**PSG* 202: Polysomnography Lab II**
1 Credits
This course is designed to provide laboratory training for entry-level personnel in the basics of polysomnographic technology. Students will become familiar with mask fitting, the application of oxygen therapy and PAP therapy, the manipulation of PAP, performing EMG hook ups, performing MSLT and MWT tests, practice setting up pediatric sleep studies and scoring all different types of sleep studies.

**Prerequisites:** PSG* 101, PSG* 102 and PSG* 150 all with a "C" or better.

**Offered:** Spring

**PSG* 250: Polysomnography Clinical II**
2 Credits
A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision will be provided by clinical professionals.

**Prerequisites:** PSG* 101, PSG* 102 and PSG* 150 all with a "C" or better.

**Offered:** Spring

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**Psychology**

**PSY* 107: Pathways to Personal Growth**
3 Credits
The purpose of this course is twofold: it is to help students develop a deeper understanding of themselves, of others, and of human life in general and to promote change and personal growth. Students will be introduced to a number of psychological tools and principles and will learn how to apply them to their own lives in such a way as to promote understanding, insight, and change. In addition to this, students will have the opportunity to develop a deeper understanding of others and of their perspectives and ways of being.

**Prerequisites:** Eligibility for ENG* 101.

**Offered:** Fall, Spring, Summer

**PSY* 111: General Psychology I**
3 Credits
The purpose of this course is to introduce students to the discipline of psychology and to the evolving body of knowledge that has been produced by this discipline. It surveys basic topic areas within psychology including psychology’s history and scientific origins, current research and measurement techniques, the physiological correlates of experience and behavior, human development, learning, memory, intelligence, and personality.

**Prerequisites:** Eligibility for ENG* 101.

**Offered:** Fall, Spring, Summer

**Fulfills General Education - Mode 6**

**Fulfills General Education - Knowledge of Human Expressions & Behavior**

**PSY* 112: General Psychology II**
3 Credits
(Formerly PSYC 112)
The purpose of this course is to introduce students to the discipline of psychology and to the evolving body of knowledge produced by this discipline. This course continues the exploration of the basic areas of study within the field of psychology begun in General Psychology I. Topics include sensation, perception, consciousness, motivation, emotion, language, cognition, social psychology, stress and health, psychological disorders, and treatment of psychological disorders.

**Prerequisites:** PSY* 111 with a grade of "C-" or better.

**Offered:** Fall, Spring

**Fulfills General Education - Mode 6**
PSY* 125: Psychology of Aging and Mental Health
3 Credits
(Formerly PSYC 125)
The course will offer a realistic portrait of the personal experiences of late life and highlight the mental health issues that confront human beings as they age.
Prerequisites: Eligibility for ENG* 101
Offered: Occasionally

PSY* 163: Children with Disabilities
3 Credits
This course is a general introduction to exceptional learners, their families, and their education. The course includes discussion of the psychological, medical, and sociological aspects of exceptional learners and their relationship to family, community, and especially the educational system. The course emphasis is on the inclusion of exceptional learners within family, community, and school. This course focuses on all exceptional learners, including gifted and/or talented students.
Prerequisites: Eligibility for ENG* 101.
Offered: Fall, Spring

PSY* 164: Assistive Technology for Students with Disabilities (K-12)
1 Credits
The goal of this course is to promote an understanding of the use of Assistive Technology for learners with disabilities. Assistive Technology can be utilized to promote participation in the least restrictive educational environment and provide students with access to and maximum participation in the mainstream educational curriculum.
Prerequisites: None
Offered: Fall

PSY* 173: Adults with Disabilities
3 Credits
(Formerly PSYC 173)
This course is a general introduction to adults with disabilities and the issues faced by them in current American society. The emphasis is on issues relating to full inclusion in neighborhoods, community associations, workplaces and leisure-recreation experiences. The Americans with Disabilities Act (ADA) and its powerful implications for full community inclusion by men and women with disabilities will be examined.
Prerequisites: Eligibility for ENG* 093 or concurrently enrolled in ENG* 066.
Offered: Spring

PSY* 174: Assistive Technology for Adults in the Workplace, Home and Community.
1 Credits
The goal of this course is to promote an understanding of the use of Assistive Technology by adults in the workplace, at home and in the community. Activities in which assistive technology can be used to facilitate independence will be addressed. Finding the resources necessary to acquire needed assistive technology will also be a focus of this course.
Prerequisites: None
Offered: Fall

PSY* 183: Learning Process and Disabilities
3 Credits
(Formerly PSYC 183)
This course explores various learning theories, especially behavior modification, as they relate to children and
PSY* 193: Issues/Trends in Disabilities
3 Credits
(Formerly PSYC 193)
This course will examine current legal, ethical, community, family and personal support issues affecting children and adults with disabilities and their families. Through the study of literature, newsletters and media accounts and by listening to the leaders and advocates of today, students will more fully understand the challenges and opportunities of people with disabilities.
Prerequisites: Eligibility for ENG* 093 or concurrently enrolled in ENG* 066.
Offered: Spring

PSY* 201: Life Span Development
3 Credits
(Formerly PSYC 124)
A survey of physical, cognitive, social and emotional changes as they are influenced by heredity and environment from conception to death. Class: 3 hours per week
Prerequisites: PSY* 111 with a grade of "C-" or better.
Offered: Fall, Spring, Summer

PSY* 203: Child Development
3 Credits
(Formerly PSYC 234)
An evaluation of current issues, theories, and research in the area of child development. This study of physical, cognitive and socioemotional development includes: genetics, development of self, language, play, learning, intelligence, personality, and social interactions from conception through age twelve.
Prerequisites: PSY* 111 with a grade of "C-" or better.
Offered: Fall, Summer

PSY* 206: Adolescent & Adult Development
3 Credits
(Formerly PSYC 244)
An exploration of current problems, theories and research in adolescent and adult development. A basic exploration of physical, cognitive, and socioemotional changes and the psychological dynamics which accompany them including adjustments, changing roles, and social relationships.
Prerequisites: PSY* 111 with a grade of "C-" or better.
Offered: Fall, Spring

PSY* 210: Death and Dying
3 Credits
(Formerly PSYC 117)
Examines the processes of death, dying and grieving. Death and loss as they relate to major developmental life tasks are also studied, including the effect of death and loss upon survivors. Both Eastern and Western perspectives are considered.
Prerequisites: Eligibility for ENG* 101.
Offered: Fall, Spring
PSY* 211: Psychology of Women
3 Credits
This course studies a variety of psychological issues and theories as they apply to women. Traditional psychological overviews give insufficient attention to or emphasis on topics critical to a psychological depiction of women. This course attempts to correct this imbalance. Topics include how women develop psychologically; how they form values and direct their behavior, including sexual behaviors; women’s anatomy; women and work and their reaction to stress; and women and substance abuse.
Prerequisites: Eligibility for ENG* 101.
Offered: Occasionally

PSY* 212: Health Psychology
3 Credits
(formerly PSYC 200)
The psychological factors that promote health and enhance resistance to disease or place people at risk for disease are explored. Emphasis is placed upon those psychological factors which can prevent or reverse illness and sustain or recapture health.
Prerequisites: Eligibility for ENG* 093 or concurrently taking ENG* 066.
Offered: Occasionally

PSY* 217: Psychology of Criminal Behavior
3 Credits
(formerly PSYC 232)
An overview on the psychological understanding of crime and the criminal. It will provide an analysis of individual differences in various criminal activities with a focus on a conceptual and practical understanding of the predictors of individual behavior.
Prerequisites: None
Offered: Occasionally
Cross listed as: CJS* 272

PSY* 220: Educational Psychology
3 Credits
Educational psychology encompasses the nature of learning, development, motivation, diversity and assessment. The major areas of emphasis for this course include the development of educational research as a science; developmental psychology’s impact on education; effective teaching techniques and strategies; behavior management and discipline; tests and measurements. Intelligence, achievement, exceptionality, and diversity will be discussed.
Prerequisites: PSY* 111 with a grade of "C-" or better.
Offered: Occasionally

PSY* 221: Data Analysis in Psychology
4 Credits
Psychological research enables psychologists to describe, predict, and explain human behavior and thought. Such research often relies on the analysis of quantitative data. In this course, you will learn how to describe, analyze, interpret, and report psychological data. Course content includes coverage of both descriptive and inferential analytic procedures. Specific topics include graphical representations of data, measures of central tendency and variability, sampling, hypothesis testing, effect size estimates, confidence intervals, correlation and regression, t-tests, analysis of variance, and non-parametric tests. Students will gain practical experience in writing reports of research according to the standard conventions of the American Psychological Association and in the use of data analysis software commonly employed by research psychologists.
Prerequisites: PSY* 111, and C- or better in MAT* 109 or MAT* 138 or MAT* 139 or eligibility for class
higher than MAT*138
Offered: Occassionally

**PSY* 222: Quantitative Research Methods in Psychology**
3 Credits
This course provides an introduction to psychological research, with a focus on developing the skills required to conduct responsible and valid research. Topics include conducting library research, developing hypotheses, measuring variables, research ethics, research design, data collection and analysis, interpretation of results, evaluating research, and writing research reports. Students will gain practical experience in the design and implementation of research by planning and conducting independent research projects, analyzing data using software commonly employed by research psychologists, and writing reports of research according to the standard conventions of the American Psychological Association.

**Prerequisites:** C- or better in PSY* 221

**Offered:** Occassionally

**PSY* 240: Social Psychology**
3 Credits
A survey of theory and research in social psychology, including the topics of conformity, obedience, attitudes and persuasion, group dynamics, the self, forming impressions and explaining behavior, altruism, aggression, romantic attraction, prejudice, and social conflict.

**Prerequisites:** PSY* 111 with a grade of "C-" or better.

**Offered:** Occasionally

**PSY* 243: Theories of Personality**
3 Credits
What did Freud really say about human personality? How is your personality influenced by your genes, your experiences, and the fear of your own mortality? Can personality change? This course will survey personality theory, research and assessment within both historical and current perspectives, including psychodynamic, humanistic, trait, biological, and social-cognitive approaches to personality.

**Prerequisites:** PSY* 111 with a grade of "C-" or better.

**Offered:** Occasionally

**PSY* 245: Abnormal Psychology**
3 Credits
The purpose of this course is to introduce students to the phenomenon of psychopathology and to the field of abnormal psychology which attempts to understand and treat it in its many forms. The course will provide students with a basic understanding of this field and survey a number of the more common psychological disorders that have been explored within it such as clinical depression, bipolar disorder, schizophrenia, eating disorders, anxiety disorders, and personality disorders. Assessment, diagnosis, and treatment will also be addressed.

**Prerequisites:** PSY* 111 with a grade of "C-" or better.

**Offered:** Fall, Spring, Summer

**PSY* 247: Industrial and Organizational Psychology**
3 Credits
*(Formerly PSYC 240)*
A survey of the psychological factors that influence the individual in the work setting. Includes employee attitudes, motivation, group dynamics, decision making, leadership, assessment and training as an introduction to human resource management.

**Prerequisites:** Completion of ENG* 101 with C- or better
PSY* 255: The Psychology of Prejudice
3 Credits
This course explores stereotypes, prejudice, and discrimination from a psychological perspective. We will examine the various ways in which psychologists study stereotypes, prejudice, and discrimination as well as the psychological causes, correlates, and consequences of these phenomena.
Prerequisites: Eligibility for ENG* 101.
Offered: Occasionally

PSY* 280: The Psychology of Social Influence
3 Credits
Social influence refers to the processes by which a person or group changes or attempts to change the opinions, beliefs, and/or behaviors of another person or group. This course will explore selected topics related to social influence from a social psychological perspective. Topics to be addressed include attitude measurement, conformity, compliance, obedience, propaganda, cults, subliminal persuasion, and the use and abuse of persuasion. Designed as a seminar, the emphasis of the course is on reading, discussion, critical thinking, and the application of course material to real world phenomena.
Prerequisites: Eligibility for ENG* 101.
Offered: Occasionally

PSY* 285: Positive Psychology
3 Credits
Positive psychology is the scientific study of the strengths and virtues that enable individuals and communities to thrive. This course will explore psychological strengths and optimal functioning, including (1) positive subjective states such as happiness; (2) positive individual traits such as wisdom and resilience; and (3) positive institutions such as healthy families, work environments, and communities.
Prerequisites: PSY* 111 with C- or better.
Offered: Occasionally

PSY* 288: Psychology of Creativity
3 Credits
Drawing in part on the book The Artist’s Way, this course will introduce students to a number of principles and practices that will serve to deepen their understanding of and appreciation for the creative process. In addition, it will assist them in identifying and developing creative goals and ambitions as well as healthy and productive creative practices, practices that will allow them to move past obstacles to creative expression and toward more creative lives.
Prerequisites: PSY* 107 or PSY* 111 with a grade of "C-" or better.
Offered: Occasionally

Quality Assurance

QUA* 110: Measurement and Measurement Systems
3 Credits
(Formerly QA 110)
An introductory course in the techniques of making successful measurements for dimensions, pressures, temperatures and other manufacturing process variables. The design and use of automated measuring and test equipment will be discussed. Methods for establishing controls for preparation and use of inspection gaging will be discussed.
Prerequisites: EGR* 112.
Offered: Occasionally

QUA* 233: Statistical Process Improvement
3 Credits
(Formerly QA 150)
A course in various statistical methods and their applications in industry. Course concentration will deal with the use of statistical logic and methods to aid in the solution of quality, production and engineering type problems.
Prerequisites: MFG* 230
Offered: Occasionally

Recreation and Leisure

RLS* 101: Introduction to Recreation and Leisure Services
3 Credits
(Formerly REC 101)
This course serves as an introduction to the field of recreation and leisure service. The student will understand the development of the recreation movement from early ages to the present with emphasis on future perspectives. Cultural, economic, and social factors in reference to leisure participation will be explored. Career opportunities in a variety of settings will be highlighted. Philosophies of recreation will be discussed. Students will develop a personal philosophy of recreation and leisure.
Prerequisites: None
Offered: Fall, Spring

RLS* 121: Introduction to Therapeutic Recreation Services
3 Credits
(Formerly THRC 115)
This course provides a background of study for the field of therapeutic recreation. It encompasses the history and development of the profession with an emphasis on understanding the persons who are served, their disabilities, and the environments in which they live. An experiential approach offers understanding and empathy.
Prerequisites: None
Offered: Fall

RLS* 122: Processes and Techniques in Therapeutic Recreation
3 Credits
(Formerly THRC 116)
This course is designed to provide an overview of the process and techniques used in treatment oriented programs. The course explores leadership skills of the helping professional through an in-depth look at facilitation techniques used in therapeutic recreation, including, but not limited to: creative arts, physical/body movement, mental stimulation, and social interaction in relation to the needs of special population groups. Emphasis is placed on meeting clients’ needs through proper activity selection, including activity analysis and program adaptation/modification.
Prerequisites: None
Offered: Spring

RLS* 221: Therapeutic Recreation Programming
3 Credits
(Formerly THRC 215)
Programs: Planning and Implementation) This course involves the student in the study of the therapeutic
recreation process with emphasis on program planning. The needs of the client will be met through a well planned process that includes assessing functional abilities and needs, planning program goals and objectives, implementing the program, and evaluating both the program and the client.

**Prerequisites:** RLS* 121 and eligibility for ENG* 101

**Offered:** Spring

**RLS* 223: Leisure and Aging**

3 Credits  
*Formerly THRC 230*

This course serves as an overview to the delivery of therapeutic recreation services to older adults. The course will assist the student in developing an understanding of the elderly and how activity intervention may be used to reach treatment and rehabilitation goals. The course will focus on issues such as the physiological, psychological, and socio-economic factors of the aging process, leisure resources, community and institutional services, and recreation in assisted living facilities and in long term care settings.

**Prerequisites:** None

**Offered:** Fall

**RLS* 295: Professional Practicum in Therapeutic Recreation**

4 Credits  
*Formerly THRC 280*

This course provides the student with practical experience in a therapeutic recreation setting. The student is required to work a minimum of 200 hours in a community based or medical setting that provides therapeutic recreation services. During this period, the student will apply the knowledge, methods, and leadership techniques which have been learned in academic courses. Students will also participate in 15 hours of classroom discussion during the semester.

**Prerequisites:** Completion of all Therapeutic Recreation course work. Students planning to take this course must notify the Program Coordinator three months prior to the start of the semester for which they plan to register.

**Offered:** Spring

**Respiratory Care**

**RSP* 121: Cardiopulmonary Anatomy & Physiology**

3 Credits  
*Formerly RC 221*

The student is given an in-depth study of the anatomy and physiology of the cardiopulmonary system. Topics will include but are not limited to: structure, function, and assessment of the cardiopulmonary system.

**Prerequisites:** To be taken concurrently with RSP* 141.

**Offered:** Fall

**RSP* 131: Applied Pharmacology**

3 Credits  
*Formerly RC 211*

This course includes the study of the composition, indication and effects of medication administered to patients treated in the field of respiratory care. Emphasis is placed on drugs prescribed for the cardiopulmonary system and those delivered by aerosol.

**Prerequisites:** To be taken concurrently with RSP* 160 and RSP* 180.

**Offered:** Spring

**RSP* 140: Principles of Respiratory Care**

3 Credits

This course will introduce the student to the theory, function, and maintenance of respiratory care equipment. Medical gases, gas laws, and the delivery of respiratory care using various pieces of equipment will be included. The emphasis of the course will be on the mechanics and function of respiratory care devices.
Prerequisites: Must be taken concurrently with RSP* 121  
Offered: Fall

**RSP* 140L: Principles of Respiratory Care Lab**
1 Credits
This course will introduce the student to the theory, function, and maintenance of respiratory care equipment in a laboratory setting. Medical gases, gas laws, and the delivery of respiratory care using various pieces of equipment will be included. The emphasis of the course will be on the mechanics and function of respiratory care devices.

Prerequisites: Must be taken concurrently with RSP* 121  
Offered: Fall

**RSP* 160: Diagnostic & Therapy Principles**
3 Credits
(Formerly RC 222)  
The theory and administration of respiratory care procedures, airway management, monitoring devices, and clinical assessment of the respiratory patient will be taught.

Prerequisites: RSP* 121. To be taken concurrently with RSP* 131 and RSP* 180.  
Offered: Spring

**RSP* 180: Clinical Practicum**
1 Credits  
(Formerly RC 202)  
Supervised clinical application of principles learned in the classroom. Students will be scheduled for various clinical rotations at health care facilities.

Prerequisites: RSP* 121 and RSP* 141 . To be taken concurrently with RSP* 131 and RSP* 160.  
Offered: Spring

**RSP* 181: Clinical Practicum II**
1 Credits  
(Formerly RC 203)  
Supervised clinical application of principles learned in the classroom. Students will be scheduled for various clinical rotations at health care facilities.

Prerequisites: RSP* 131, RSP* 160, RSP* 180 and BIO* 212.  
Offered: Summer

**RSP* 251: Respiratory Pathophysiology**
3 Credits  
(Formerly RC 282)  
The study of cardiopulmonary abnormities and diseases of the adult patient. Major emphasis will be placed on the diagnosis and treatment of patients using case study analysis.

Prerequisites: To be taken concurrently with RSP* 251, RSP* 274 and RSP* 282.  
Offered: Fall

**RSP* 252: Respiratory Pathophysiology II**
2 Credits  
(Formerly RC 283)  
The study of cardiopulmonary abnormities and diseases of the adult, pediatric and newborn patient. Major emphasis will be placed on the diagnosis, treatment, and management of patients using case study analysis.

Prerequisites: To be taken concurrently with RSP* 261 and RSP* 282.  
Offered: Spring
RSP* 260: Advanced Principles of Ventilator Therapy
3 Credits
(Formerly RC 242)
A study of mechanical ventilators used in respiratory care with an in-depth explanation of function and application. Indications, hazards and complications of mechanical ventilation will be emphasized.
Prerequisites: RSP* 160
Offered: Summer

RSP* 261: Advanced Respiratory Care II
3 Credits
(Formerly RC 261)
A study of the respiratory care modalities used in the care of neonates and pulmonary rehabilitation patients. Each population will be discussed in separate units.
Prerequisites: To be taken concurrently with RSP* 252 and RSP* 282.
Offered: Spring

RSP* 274: Diagnostic Respiratory Care
3 Credits
(Formerly RC 251)
A study of the pulmonary and cardiac assessment, critical care monitoring, and fluid and electrolyte balance as it relates to cardiopulmonary medicine.
Prerequisites: BIO* 212. To be taken concurrently with RSP* 251 and RSP* 281.
Offered: Fall

RSP* 281: Advanced Clinical Practicum
2 Credits
(Formerly RC 204)
Supervised clinical application of principles learned in the classroom. Students will be scheduled for various clinical rotations at health care facilities.
Prerequisites: RSP* 260 and RSP* 181. To be taken concurrently with RSP* 261 and RSP* 252.
Offered: Spring

RSP* 282: Advanced Clinical Practicum II
2 Credits
(Formerly RC 205)
Supervised clinical application of principles learned in the classroom. Students will be scheduled for various clinical rotations at health care facilities.
Prerequisites: RSP* 251, RSP* 274, RSP* 281. To be taken concurrently with RSP* 261 and RSP* 252.
Offered: Spring

Sign Language

SGN* 103: Sign Language III
3 Credits
This course is a continuation of Sign Language I and II. Emphasis is placed on improving speed and fluency when communicating in ASL. In addition, students will learn basic storytelling features.
Offered: Occasional
Cross listed as: SGN* 101 and SGN* 102.
SGN* 101: Sign Language I
3 Credits
(Formerly ASL 101)
American Sign Language (ASL) is the sign language most deaf people use when communicating among themselves. Students will learn grammatical features, vocabulary and conversational skills including expressive and receptive skills of ASL. In addition, students will learn the culture of the deaf community, the history of ASL and the relationship of ASL to other forms of signing.
Prerequisites: None
Offered: Fall, Spring

SGN* 102: Sign Language II
3 Credits
(Formerly ASL 102)
This course is a continuation of American Sign Language I. Students will learn grammatical features, vocabulary and conversational skills including expressive and receptive skills of ASL. In addition, students will learn the culture of the deaf community, the history of ASL and the relationship of ASL to other forms of signing.
Prerequisites: SGN* 101
Offered: Fall, Spring

SGN* 104: Sign Language IV
3 Credits
This course continues to build upon students’ receptive and expressive skills at the advanced level while expanding their knowledge of Deaf culture and the influences of other sign language systems. Emphasis is placed on advanced fingerspelling, ASL structure and vocabulary. Instruction utilizes a natural approach to teaching a second language by engaging students in authentic conversations within the classroom environment and through out-of-class interactions with members of the Deaf community.
Prerequisites: SGN* 101, SGN* 102 and SGN 103
Offered: Fall

SGN* 105: Deaf Culture and History
3 Credits
This course introduces students to Deaf people as a cultural linguistic minority group. Students may or may not have had prior experience with Deaf people. It examines the values, norms, and traditions of Deaf people in North America. It emphasizes myths surrounding deafness, the historical treatment of deafness and Deaf people, the anatomy of the ear and the etiology of hearing loss, the education of deaf children, the deaf identity, legislation that affects the Deaf and hard of hearing population, interpreters and their work between cultures, deaf-blindness, and current controversies in technology and education. Although this course focuses on Deaf people in the western world, global comparisons are drawn.
Prerequisites: None
Offered: Fall

Social Science

SSC* 150: Transition Development
2 Credits
(Formerly SOSC 150)
This course is designed for adult students who are resuming their education. Topics include goal setting, academic and career choices, math anxiety, family and work stresses, problem solving, and skill building. Open only to students in the Adults in Transition program.
Prerequisites: None
Offered: Fall, Spring

**SSC* 155: Women's Issues and the Law**

3 Credits
*(Formerly SOSC 155)*

An examination of legal responses to gender-based treatment in society. Legal materials will be studied to provide both a historical and current perspective on issues affecting women and men. Readings will be used as the basis for public policy discussions and greater understanding of the law of sex discrimination.

Prerequisites: None
Offered: Fall

**SSC* 201: Introduction to African American Studies**

3 Credits
*(Formerly SOSC 201)*

An interdisciplinary survey course of the historical, social, economical, political, philosophical and cultural experience of the African American. This course serves as the introductory course to give students an Africentric perspective to evaluating information in society; other philosophical perspectives may be introduced. Recommended for potential U.S. History and American Studies majors.

Prerequisites: None
Offered: Occasionally

**SSC* 220: Computers' Impact on Society**

3 Credits
*(Formerly SOSC 220)*

After studying the fundamentals of how computers work in order to understand their capabilities and limitations, the course explores the kinds of purposes to which computers are being put in our world: how computers are affecting us individually and as a society; the methods used and intrinsic difficulties in using computers to tackle business, economic, social, scientific, etc. problems; the positive and negative effects of computers; the ethics surrounding the use of computers; how to make rational, ethical, and humane technological decisions; and how, in private and professional life, to make informed, reasoned judgments regarding computing technology issues. Current computer issues and news items are used as case studies.

Prerequisites: None
Offered: Occasionally

**SSC* 242: American Families**

3 Credits
*(Formerly SOSC 242)*

A look at nuclear American family life from early Colonial period to the present, to see how various commentators have regarded and evaluated American families. Course will rely on the writings of historians, sociologist, novelists and social critics.

Prerequisites: None
Offered: Occasionally

**SSC* 262: Puerto Rican History and Culture**

3 Credits
*(Formerly SOSC 262)*

An introduction to the history and culture of Puerto Rico designed to give both Hispanic and other students an understanding of the historical factors and the cultural concepts that help develop today’s Puerto Rico and its people, both on the island and on the mainland.
Prerequisites: None

Offered: Occasionally

**SSC* 294: Cooperative Education/Work Experience**

3 Credits
*(Formerly SOSC 270)*

This course provides students the opportunity to apply classroom theory in an actual work setting. Students may be placed in a variety of work settings as related to their program of study including social service agencies, day care facilities, and corporations.

**Prerequisites:** 12 completed credit hours in the Social Service, Disabilities Specialist, Criminal Justice, Sport and Exercise, Therapeutic Recreation, and Early Childhood/Educational Associate programs.

**Offered:** Fall, Spring

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**Sociology**

**SOC* 100: Community Engagement**

3 Credits

This course provides students with an enhanced understanding of the local community and the diversity of groups within the community. Students are required to perform structured community service throughout the semester and to reflect and engage with other students on the meaning of diversity and community. Through readings, critical reflection, group discussions and interactions, and volunteer service, students will learn community leadership and civic engagement and discuss how communities might bridge differences among people. This course will require 1-3 hours of community service per week (or the equivalent). NOTE: This is a Pass/Fail course. All Students completing the course will receive either a grade of Pass (P) or Fail (F) on their transcript. See the instructor for more specific information.

**Prerequisites:** None

**Offered:** Fall, Spring

**Fulfills General Education - Mode 6**

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**SOC* 101: Principles of Sociology**

3 Credits
*(Formerly SOC 101)*

This course is designed to provide students with a basic overview and understanding of the discipline of sociology. The course focuses on the concepts, methods, theories, and levels of analysis used in the study of social interaction. The readings and lectures will examine a broad range of social issues and questions; the different theories of social behavior used to explain these questions; and the ways in which sociologists scientifically examine these theories. The goal of the course is to provide students with the ability and knowledge to critically examine and understand the social issues that impact their daily lives.

**Prerequisites:** Eligibility for ENG* 101.

**Offered:** Fall, Spring

**Fulfills General Education - Mode 6**

**Fulfills General Education - Knowledge of Human Expressions & Behavior**

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**SOC* 116: Impact of Aging on the Family**

3 Credits
*(Formerly SOC 205)*

This course will consider key social issues and current service delivery systems that affect the aged population.

**Prerequisites:** SOC* 101

**Offered:** Spring
SOC* 200: Queer Sociology
3 Credits
This course provides a critical exploration of identity based understandings of sex, gender, orientation, race and the family. Using assigned readings, experiential activities, and classroom discussion, students will incorporate queer theories as well as personal values to challenge their assumptions and undermine previously unquestioned ‘givens’ about each of these topics. Finally, students will explore the question: what is possible (as individuals, as a society) if we assume no causal relationship among sex, gender, sexuality and desire?
Prerequisites: Eligibility for ENG* 101.
Offered: Occasionally

SOC* 201: Contemporary Social Issues
3 Credits
(Formerly SOC 202)
A detailed analysis of major social problems in American society. Problems including population, ecology, poverty, race and ethnic relations, urbanization, the role of the media, criminal activity, aging, health, and housing will be evaluated. Emphasis is on American society, but some international issues and situations will be examined. Community awareness and involvement will be stressed as students evaluate local issues as well.
Prerequisites: SOC* 101
Offered: Fall, Spring

SOC* 205: Sociology In Film
3 Credits
This course is designed to teach key sociological topics through film. In this course, we will examine how a range of social issues are depicted in both documentary and popular film. Students study such issues as race relations, family dynamics, urbanization, gender and reproduction, and crime by viewing films, analyzing the films’ content, and reading sociology literature.
Prerequisites: SOC* 101
Offered: Occasionally

SOC* 210: Sociology of the Family
3 Credits
(Formerly SOC 231)
This course will explore the complexity and diversity of the contemporary family and other intimate relationships. Topics for this course include mate selection, gender roles, sexuality, communication, power and conflict, family violence, parenthood, work/family interaction, and diverse family arrangements.
Prerequisites: Eligibility for ENG* 101.
Offered: Fall, Spring

SOC* 211: Sociology of Gender
3 Credits
This course addresses the distinction between biological sex and the social construction of gender and investigates issues about the dynamics of sex and gender relationships in different socio-cultural contexts. Major topics for discussion include gender role differentiation, sex role stereotyping, and changes over time in male/female relationships in North American society with the differences and inequalities shaped by social class, race, ethnicity, sexuality, age and national origin. A global perspective, which examines and compares the place of gender in nations of the North with those of the South, is also emphasized.
Prerequisites: SOC* 101
Offered: Occasionally
SOC* 212: Sociology of Women
3 Credits
(Formerly SOC 261)
An interdisciplinary study of women in contemporary America, making use of the data and methodology of history, psychology and sociology.
Prerequisites: Eligibility for ENG* 101.
Offered: Occasionally

SOC* 215: Women and Prisons
3 Credits
This course examines demographic characteristics, current offenses, criminal histories, the women’s family background, children, drug and alcohol use, prior physical and sexual abuse, and health issues. This course also includes a basic introduction to doing sociological research on a topic as each student will pick a states prison population to examine individually.
Prerequisites: Eligibility for ENG* 101.
Offered: Occasionally

SOC* 220: Racial & Ethnic Diversity
3 Credits
(Formerly SOC 271)
This course focuses on the interrelationship of institutionalized prejudice and discrimination and related aspects of diversity in society. The experience of various ethnic and racial minorities in the United States is investigated through the study of the origins and functions of subordination in society.
Prerequisites: Eligibility for ENG* 101.
Offered: Occasionally

SOC* 227: The Native American Experience
3 Credits
Students will become familiar with the major issues and topics of tribes in Connecticut such as tribal recognition, and casino development. The course will also examine economic, political, and social concerns of tribes in North America. With much class participation and contact with guest speakers, students will bring into sharper focus the real day to day issues of native people who “more than 500 years after the European Invasion of North America are still seeking to work out relations, as descendents of the first Americans, with the people of modern American society.”
Prerequisites: Eligibility for ENG* 101.
Offered: Occasionally

SOC* 228: African American Sociology and Literature
3 Credits
This course introduces students to ways in which scholars examine the African American experience as a major topic in Sociology and Literature. The course is taught from an interdisciplinary perspective that emphasizes methodologies and approaches from both the humanities and the social sciences framing inquiries about African American literary creations, social life, history, and socio-cultural organization. The goal of the course is for each student to look at black culture and society in a broader and more complex way.
Prerequisites: SOC* 101 and ENG* 120.
Offered: Occasionally

SOC* 240: Criminology
3 Credits
Introduces the fundamental principles of criminology; namely, the nature, existence and causation of crime, the
problems and procedures involved in the administration of justice, and rehabilitative and corrective treatment. 
Prerequisites: SOC* 101.
Offered: Spring

SOC* 241: Juvenile Delinquency
3 Credits
(Formerly SOC 211)
Examines the social aspects of juvenile delinquency and the pressures that cause this behavior to emerge. The organization, functions and jurisdiction of the juvenile court system, as well as processing, detention, case disposition and juvenile delinquency statutes, are examined.
Prerequisites: SOC* 101
Offered: Occasionally

SOC* 242: Sociology of Deviance
3 Credits
(Formerly SOC 203)
This course will provide an overview and analysis of deviant behavior and social control. The course will critically review and discuss the causes of deviance and societal attempts at controlling deviant behavior. Topics to be studied include alcohol and drug abuse, criminal activity, disabilities, mental illness, sexual deviance, violent behavior and abuse, elite deviance, and collective deviance.
Prerequisites: Eligibility for ENG* 101.
Offered: Fall, Spring

Spanish

SPA* 108: Elementary Spanish I & II
8 Credits
(Formerly SPAN 108)
An intensive, beginning Spanish course in which two semesters of Spanish (SPA* 111 and SPA* 112) are completed in one semester. Students will develop all four language skills. The emphasis in class will be speaking and listening, the assignments will emphasize reading and writing. Hispanic culture will be studied. No previous Spanish language experience required. Transfer college may not award credit for this course if the student has already completed two or more years of Spanish at the high school level.
Prerequisites: None
Offered: Fall, Spring
Fulfills General Education - Mode 3

SPA* 111: Elementary Spanish I
4 Credits
(Formerly SPAN 101)
An introduction to spoken and written Spanish. Emphasis is on basic grammar and developing all four language skills (reading, writing, listening and speaking) with an emphasis on Hispanic culture. No previous Spanish language experience required. Transfer college may not award credit for this course if the student has already completed two or more years of Spanish at the high school level.
Prerequisites: None
Offered: Fall, Summer
Fulfills General Education - Mode 3

SPA* 112: Elementary Spanish II
4 Credits
(Formerly SPAN 102)
A second semester course in which students develop all four language skills (reading, writing, listening, and
speaking) while studying grammatical structures (preterite, imperfect, object pronouns, reflexive verbs) that are more advanced than those studied in the first semester Spanish course. Hispanic culture will be studied.

**Prerequisites:** SPA* 111, one year of high school Spanish, or permission of instructor. Transfer college may not award credit for this course if the student has already completed two or more years of Spanish at the high school level.

**Offered:** Spring, Summer

**Fulfills General Education - Mode 3**

**SPA* 130: Spanish Culture**

3 Credits  
*(Formerly SPAN 125)*

A survey of Spanish culture taught in English. Topics of study include art, music, literature, history, geography, political systems, bullfighting, and culture with a small “c” (use of two surnames, extended families, cuisine, etc.)

**Prerequisites:** None

**Offered:** Occasionally

**Fulfills General Education - Mode 3**

**SPA* 131: Hispanic Culture**

1, 2 or 3 Credits  
*(Formerly SPAN 130)*

This is an independent study course which is offered in conjunction with an academic trip and is available only to participants of that trip. Pre-trip assignments will prepare the students for the research that will be done in the country of the trip and post-trip assignments will organize and analyze the information observed and collected in the Hispanic country. (This course can be done in English or in Spanish.) Class: hours per week will depend on number of credit hours. Co-requisite: student must participate in an academic trip sponsored by MCC.

**Prerequisites:** None

**Offered:** Occasionally

**Fulfills General Education - Mode 3**

**SPA* 135: Hispanic Culture and Conversation**

3 Credits  
*(Formerly SPAN 145)*

A one-semester, first-level course for two-year career program students which stresses aspects of Hispanic culture, as well as pronunciation and vocabulary skills in Spanish, that would be helpful as an additional tool in future employment, job advancement, and effective fulfillment of daily job routines.

**Prerequisites:** None

**Offered:** Occasionally

**Fulfills General Education - Mode 3**

**SPA* 145: Mexican Culture**

3 Credits  
*(Formerly SPAN 145)*

A survey of Mexican culture taught in English. Topics of study includes art, music, literature, ancient civilizations, history, geography, political systems, bullfighting, and culture with a small “c” (use of two surnames, bargaining in the market, extended families, cuisine, etc.).

**Prerequisites:** None

**Offered:** Occasionally

**SPA* 208: Intermediate Spanish I and II**

8 Credits  
*(Formerly SPAN 208)*
An intensive, intermediate Spanish course in which two semesters of Spanish (SPA* 211 and SPA* 212) are completed in one semester. Students will be taught all four language skills with an emphasis on speaking and listening in class and an emphasis on reading and writing through the assignments. Cultural readings will be in Spanish.

**Prerequisites:** SPA* 112 or SPA* 108 or two years of high school Spanish or permission of instructor.

**Offered:** Occasionally

**Fulfills General Education - Mode 3**

**SPA* 211: Intermediate Spanish I**

4 Credits  
(Formerly SPAN 201)

A third semester course in which grammar, conversation and reading materials are at an intermediate level. Cultural readings will be in Spanish.

**Prerequisites:** SPA* 111, and SPA* 112 or SPA* 108 or two years of high school Spanish or permission of instructor.

**Offered:** Fall

**Fulfills General Education - Mode 3**

**SPA* 212: Intermediate Spanish II**

4 Credits  
(Formerly SPAN 202)

A fourth semester course in which the grammar, conversation and reading materials are at an intermediate level. Cultural readings will be in Spanish.

**Prerequisites:** SPA* 211 (211) or three years of high school Spanish or permission of instructor.

**Offered:** Spring

**Fulfills General Education - Mode 3**

**SPA* 251: Advanced Spanish I**

4 Credits

A fifth semester course in which language skills will be reinforced while increased emphasis is placed on composition and conversation. Literature and culture will also be studied in Spanish.

**Prerequisites:** SPA* 212, SPA* 208 or permission of the instructor.

**Offered:** Occasionally

**Fulfills General Education - Mode 3**

**SPA* 252: Advanced Spanish II**

4 Credits

A sixth semester course in which language skills will be reinforced while increased emphasis is placed on composition and conversation. Literature and culture will also be studied in Spanish.

**Prerequisites:** SPA* 212, SPA* 208 or permission of instructor.

**Offered:** Occasionally

**Fulfills General Education - Mode 3**

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**Speech-Language Pathology Assistant**

**SLP* 111: Communication Development**

3 Credits

An overview of the milestones of form, content, and use in the process of typical communication development for children from infancy through adolescence.

**Prerequisites:** Eligibility for ENG* 093 or concurrently taking ENG* 066.

**Offered:** Fall
SLP* 112: Speech and Language Services in the Educational Setting
3 Credits
This course will address professional issues related to the role of the Speech-Language Pathology Assistant in the practice of speech/language pathology in schools. Topics will include, but are not limited to, the legal and policy framework for school services, ethical practice, supervision, collaboration, scheduling, data collection, advocating, professional development, resources, and professional trends. This course includes an observation component.
Prerequisites: SLP* 111 or concurrently taking SLP* 111.
Offered: Spring

SLP* 120: Communication Disorders and Intervention I
3 Credits
A general overview of language, and hearing disorders in preschool and school-aged children, their impact on literacy acquisition, and evidence-based interventions. This course will prepare Speech/Language Pathology Assistants for their role in providing oral language and literacy interventions to children with language and hearing disorders in educational settings.
Prerequisites: SLP* 111.
Offered: Fall

SLP* 121: Communication Disorders and Intervention II
3 Credits
A general overview of phonology, voice, and fluency disorders in preschool and school aged children, with a focus on phonology (i.e., speech) problems and evidenced-based interventions. This course will prepare Speech/Language Pathology Assistants for their role in providing assistance to children with phonology disorders in educational settings and will also prepare them to work with students with significant/severe communication needs (e.g., non-verbal/low verbal children requiring assistive technology [AT] or augmentative/alternative communication [AAC] systems).
Prerequisites: SLP* 111.
Offered: Spring

Student Development

SD 100: Creating Your Own College Success
1 Credits
This course is designed to help students maximize the value of their college experience. Topics include self assessment, goal setting, decision making, and time management. Emphasis will be placed on the development of a plan leading to a successful college experience.
Prerequisites: None
Offered: Fall, Spring

SD 101: Career Life Planning
3 Credits
A course designed to develop the knowledge and skills necessary for lifelong career planning. Students will increase their self-awareness through analysis of self-assessment data obtained from biographical data, interest inventories, value surveys, personality surveys, and ability surveys. Students will also develop personal career directions and strategies for working toward them. Students will be expected to share personal and life experiences in group settings.
Prerequisites: None
Offered: Fall, Spring
SD 103: Introduction to Information
3 Credits
After completion of the course students will recognize the need for information and be able to access, evaluate, classify, store and manipulate new information. In addition they will understand the pertinent issues surrounding the use of information and recognize the importance of information literacy in lifelong learning.
Prerequisites: None
Offered: Occasionally

SD 111: First Year Experience: Foundations for College Success
3 Credits
This course focuses on the academic culture, essential study skills and self-exploration to empower students to make wise choices and create success both in college and in life.
Prerequisites: Eligibility for ENG* 093.
Offered: Fall, Spring

Surgical Technology

SUR* 101: Operating Room Procedures I
4 Credits
(Formerly ST 101)
An introduction to theoretical experience of the basic skills used in an operating room: aseptic technique, technologists’ arts, instrumentation, draping techniques, and related operating room skills. An explanation of essential patient care concepts necessary for effective functioning in an operating room.
Prerequisites: Permission of the Surgical Technology Program Coordinator.
Offered: Fall

SUR* 102: Operating Room Procedures II
4 Credits
(Formerly ST 102)
An introduction to practical experience of the basic skills used in an operating room: aseptic technique, technologists’ arts, instrumentation, draping techniques, and related operating room skills such as mock operations in lab. Includes an extensive survey of various surgical specialties including specific operations in each discipline.
Prerequisites: Successful completion of SUR* 101.
Offered: Spring

SUR* 201: Seminar in Surgery
2 Credits
(Formerly ST 106)
This course serves as a bridge between the preclinical and clinical phases of the program and emphasizes the total picture of the surgical patient. Students learn about health care departments outside the operating room that are integral to diagnosis and treatment of surgical conditions. Presentations by physicians and practitioners emphasize surgical procedures and perioperative care of the patient.
Prerequisites: Successful completion of SUR* 102
Offered: Summer

SUR* 220: Clinical Experience I
2 Credits
(Formerly ST 220)
An introduction to clinical practice in general and specialty surgical procedures in the operating room and outpatient facilities. Emphasis is on applying skills learned in the pre-clinical courses to clinical practice
including experiences in basic operating room procedures and minor surgery.

Prerequisites: Successful completion of SUR* 102.

Offered: Summer

**SUR* 221: Pathology/Pharmacology for the Surgical Technologist**

3 Credits

This course focuses on the topics relating to Surgical Technology as identified in the 5th Edition of the Core Curriculum for Surgical Technology. The pathology and pharmacology of each organ system will be discussed concurrently.

Prerequisites: BIO* 212

Offered: Spring

**SUR* 222: Clinical Experience II**

4 Credits

(Formerly ST 222)

Clinical practice in the operating room concentrating on experience in basic procedures of general and specialty surgery.

Prerequisites: Successful completion of SUR* 220.

Offered: Fall

**SUR* 224: Clinical Experience III**

4 Credits

(Formerly ST 224)

Clinical practice in the operating room concentrating on experience in advanced levels of general and specialty surgery. Includes classroom preparation for the national certification examination and development of job search skills.

Prerequisites: Successful completion of SUR* 222.

Offered: Spring

**SUR* 225: Advanced Seminar in Surgery**

2 Credits

This course will review the basic principles and practices taught in the Surgical Technology program. This course will focus on the objectives of the National Certification Examination for Surgical Technologists (CST) using an online learning system, lecture and practice tests. The purpose of this course is to prepare students to pass the CST examination which is required for employment as a surgical technologist.

Prerequisites: SUR* 221 and SUR* 222

Offered: Spring

**Theatre**

**THR* 101: Introduction to Theater**

3 Credits

This course explores the range of theatrical conventions present in theater throughout the world. Students will participate in hands-on activities in acting, directing, and design. Students will complete a research paper on a topic in theater history in addition to writing responsively throughout the course both in class and online.

Prerequisites: Eligibility for ENG* 101.

Offered: Fall, Spring

Fulfills General Education - Mode 1

Fulfills General Education - Knowledge of Human Thought & Expression
THR* 110: Acting I  
3 Credits  
(Formerly THEA 181)  
A first course in acting. Students will focus on relaxation and physical awareness, and on developing their imagination, concentration and characterization skills. They will be introduced to basic vocal and physical techniques. Class: 3 hours per week.  
**Prerequisites:** None  
**Offered:** Fall, Spring  
**Fulfills General Education - Mode 1**

THR* 190: Theater Practicum  
3 Credits  
Students will receive instruction and participate in all aspects of staging a theatrical production. Students will work in areas such as research, scriptwriting, designing and developing sets, acquiring and creating props, costuming, make-up, lighting, sound, acting, theater administration and management. The capstone project for this course will be a play staged in cooperation with a local theater group.  
**Prerequisites:** None  
**Offered:** Fall, Spring

THR* 210: Acting II  
3 Credits  
(Formerly THEA 182)  
A continuation of THR* 110. Students will focus on script analysis and interpretation, and will expand their emotional, expressive and technical ranges.  
**Prerequisites:** THR* 110 or equivalent training or experience.  
**Offered:** Spring
General Education Modes

The liberal arts/general education core is an integral part of every degree program. Through a variety of courses, students are exposed to the modes of thought in the arts, the humanities, the social sciences, mathematics, and the natural sciences. These courses help the student to think logically, flexibly and critically. They provide the opportunity to develop skills in written and oral communication, and to gain an awareness and understanding of both the human and natural worlds around us. The liberal arts/general education core helps prepare students for changes in the world of work, and for meeting the challenges of the world outside of work - the world of self, of family, of society and of the physical universe.

Manchester Community College's General Education core consists of six modes of study. Students need to complete 21-23 credits of general education to earn a degree. Programs of study will indicate which courses fulfill the general education modes. In some cases, the student will be able to choose a course which meets the general education outcomes from the lists provided with each mode. Students should consult with an academic advisor or program coordinator for advice regarding the general education requirements for a particular program of study.

The General Education Modes are:
- Mode 1 - The Arts
- Mode 2 - English Composition
- Mode 3 - The Humanities
- Mode 4 - Mathematics
- Mode 5 - Science
- Mode 6 - The Social Sciences

Integrated General Education

Beginning in the Fall 2012 semester, the new Integrated General Education will be required for the Liberal Arts and Science and General Studies programs. The Integrated General Education core will replace the former General Education Modes in these programs.

The Integrated General Education Philosophy

Manchester Community College provides students with comprehensive skills and the knowledge to prepare them to deal with complexity, diversity, and change. Broad, foundational knowledge complements in depth achievement in program concentrations. By completing the 21 credits of general education required of all degree programs, students acquire the essential skills of reading and writing, critical and creative thinking, information literacy, quantitative analysis, integrative learning, and a beginning understanding of three knowledge areas.

Nine credits of the Integrated General Education core are devoted to the intellectual skills core. In English Composition, students learn and demonstrate reading, writing, and critical thinking skills that they continue to practice and develop in their college-level work and beyond. In Mathematics, students learn essential problem solving and techniques of quantitative analysis. In Interdisciplinary Studies, students learn the purpose of liberal education, reflect upon their own
education, integrate the knowledge and methods of multiple disciplines, synthesize diverse and contradictory points of view, and interpret issues and positions contextually.

Twelve credits of the Integrated General Education core are devoted to gaining knowledge of the physical and natural world; of the human experience and behavior; and of human thought and expression. Students will understand and apply introductory methods of inquiry and analysis and demonstrate knowledge of the fundamental concepts, theories, works, or ideas within each specific knowledge area.

The Integrated Core

Intellectual Skills
- ENG* 101: Composition
- MAT* 109: Quantitative Literacy or higher
- IDS* 201: Explore [Theme]

Knowledge Areas
- Knowledge of the Physical and Natural World
- Knowledge of Human Experience and Behavior
- Knowledge of Human Thought and Expression

General Education Outcomes and Assessment
One or more common assessments for each General Education course will be used to evaluate the effectiveness of the Integrated General Education curriculum in meeting the three areas listed below:
- Evaluation of the stated course objectives in the standard course outline. (Discipline Specific Assignment(s))
- An evaluation of the student’s comprehension of an exemplary primary work in the discipline (an original source) in addition to the text in the class. (Exemplary Work Assignment)
- An evaluation of a substantive written assignment in the discipline. (Written Assignment)

General Education Outcomes
Upon completion of each General Education course, the student will be able to:

Knowledge Areas
- Demonstrate knowledge of the fundamental concepts, theories, works or ideas within the specific knowledge area.
- Comprehend a substantive, exemplary written work in the specific knowledge area.
- Understand and apply introductory methods of inquiry and analysis in the specific knowledge area.

Critical and Creative Thinking
- Explore and comprehend issues, ideas, artifacts and events.
- Combine or synthesize existing ideas, images or expertise in original ways.
- Assess or formulate an opinion or conclusion based upon the two previous outcomes in an innovative or imaginative way.
Information Literacy

- Evaluate information and its sources critically.
- Use information effectively to accomplish a specific purpose.
- Access and use information ethically and legally.

Written Communication

- Adhere to genre and disciplinary conventions.
- Provide clear organization and effective transitions between paragraphs and sentences.
- Use correct syntax and mechanics.

Academic Calendar 2013-2014

SUMMER SESSION 2013 (Continuing Education)

Monday     May 27     Memorial Day (College closed)
Tuesday    May 28     3-week morning session, May 28-June 14
Tuesday    May 28     6-week day/evening and intensive session I begins, May 28-July 6
Thursday   May 30     Commencement, Class of 2014
Monday     June 10    8-week day/evening session, June 10-August 3
Monday     June 24    6-week day/evening session, June 24-August 1
Thursday   July 4     Independence Day observed (College closed)
Monday     July 8     6-week day/evening and intensive session II, July 8-August 17

FALL SEMESTER 2013

Monday, Tuesday August 26, 27     Professional days#
Wednesday August 28     Fall classes begin
Wednesday August 28     Accelerated Session 1 (August 28 - October 19)
Monday    September 2    Labor Day (College closed)
Accelerated Session 2, Late Start (September 11 - December 17)

Monday October 21 Accelerated Session 3 (October 21 - December 17)

Wednesday October 30 Last day to make up incompletes

Wednesday October 30 Last day to drop classes without penalty

Tuesday November 5 Election Day (no classes)*

Wednesday November 27 Thanksgiving recess begins (no classes)*

Thursday November 28 Thanksgiving Day (College closed)

Friday November 29 College closed

Monday December 2 Classes resume

Tuesday December 10 Last day of classes

Wednesday December 11 Final exams begin

Tuesday December 17 Final exams end

Friday December 20 Final grades due (by 12:00 noon)

Monday December 23 Fall semester ends

**WINTER INTERSESSION 2013-14**

Thursday December 26 December 26-January 15

**SPRING SEMESTER 2014**

Monday January 20 Martin Luther King Day (College closed)

Tuesday and Wednesday January 21, 22 Professional days #

Thursday January 23 Spring classes begin
<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thursday</td>
<td>January 23</td>
</tr>
<tr>
<td></td>
<td>Accelerated Session 1 (January 23 - March 15)</td>
</tr>
<tr>
<td>Thursday</td>
<td>February 6</td>
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<tr>
<td></td>
<td>Accelerated Session 2, Late Start (February 6 - May 19)</td>
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<tr>
<td>Monday</td>
<td>February 17</td>
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<tr>
<td></td>
<td>President's Day (College closed)</td>
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<tr>
<td>Monday</td>
<td>March 17</td>
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<tr>
<td></td>
<td>Spring recess begins (no classes)*</td>
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<tr>
<td>Monday</td>
<td>March 24</td>
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<td></td>
<td>Classes resume</td>
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<tr>
<td>Monday</td>
<td>March 24</td>
</tr>
<tr>
<td></td>
<td>Accelerated Session 3 (March 24 - May 19)</td>
</tr>
<tr>
<td>Thursday</td>
<td>April 3</td>
</tr>
<tr>
<td></td>
<td>Last day to make up incompletes</td>
</tr>
<tr>
<td>Thursday</td>
<td>April 3</td>
</tr>
<tr>
<td></td>
<td>Last day to drop classes without penalty</td>
</tr>
<tr>
<td>Thursday</td>
<td>April 17</td>
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<tr>
<td></td>
<td>Spring weekend (no classes)*</td>
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<tr>
<td>Friday</td>
<td>April 18</td>
</tr>
<tr>
<td></td>
<td>Good Friday (College closed)</td>
</tr>
<tr>
<td>Monday</td>
<td>May 12</td>
</tr>
<tr>
<td></td>
<td>Last day of classes</td>
</tr>
<tr>
<td>Tuesday</td>
<td>May 13</td>
</tr>
<tr>
<td></td>
<td>Final exams begin</td>
</tr>
<tr>
<td>Monday</td>
<td>May 19</td>
</tr>
<tr>
<td></td>
<td>Final exams end</td>
</tr>
<tr>
<td>Thursday</td>
<td>May 22</td>
</tr>
<tr>
<td></td>
<td>Final grades due (by 12:00 noon)</td>
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<tr>
<td>Thursday</td>
<td>May 29</td>
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<tr>
<td></td>
<td>Commencement, Class of 2013</td>
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<tr>
<td>Saturday</td>
<td>June 2</td>
</tr>
<tr>
<td></td>
<td>Spring semester ends</td>
</tr>
</tbody>
</table>

*Administrative offices open.

*College services may be limited.

The term "College closed" means that no classes will be held and no college services will be available. The "no classes" dates do not apply to Continuing Education classes. Please note: start and end dates vary for Continuing Education non-credit courses. Please check Continuing Education course catalogs.
Admissions
860-512-3210
Manchester Community College has an ‘open door’ admissions policy for graduates of approved accredited high schools or those individuals that possess a high school equivalency diploma. Admission to the college does not necessarily mean admission to all courses or programs.

Degree or Certificate Students (Matriculation)
Students applying for a degree or certificate program must complete the Admissions Application along with a one-time non-refundable $20 application fee, submit official transcripts or diploma from an approved high school/college or an official copy of a high school equivalency diploma, and submit proof of measles/rubella, mumps and varicella immunizations.

Requirements for Admissions
An applicant must be a graduate of an approved high school, possess a high school equivalency diploma (via the GED program) or be a college graduate. Students are required to be in-state legal residents for a period of one full year prior to the date of the first class of the semester to receive benefits of the in-state tuition rate. Proof of residency may be required by the Admissions office.

Students are admitted to the college for courses that begin in the fall semester (August) and in the spring semester (January). Persons wishing to study at MCC are urged to apply for admissions as early as possible before the semester in which they expect to begin. New and transfer students are encouraged to apply for new student advising and registration prior to mid-June for the fall semester and prior to mid-December for the spring semester. New students that apply after these dates can still register during walk-in registration, however, there is no guarantee that the courses students would like to register for will be available at that time.

Health Career Applications
860-512-2704
Students interested in pursuing a health career must fill out a separate Health Career Application in addition to the Admissions Application. There is no charge for the Health Career Application. Health Career Applications are available in the Admissions office, the Health Careers office (LRC A237) or on the college website. Applications for the Dental Assistant, Occupational Therapy Assistant, Physical Therapist Assistant, Polysomnography, Respiratory Care and Surgical Technology programs are accepted year-round. Please consult program coordinators for specific deadlines. Completed applications should be returned to the Admissions office, Lowe L156, or to the Health Careers office, LRC A237. No special application is required for the Therapeutic Recreation and Health and Exercise Science programs.

Online Program Applications
Students interested in applying for an online degree program must take the SmarterMeasure self-assessment test to determine if online learning is a good choice for them. The next step is to complete a student profile and speak to an advisor regarding the steps to successfully completing their online degree. Students will then complete an application to MCC and receive instructions about applying for financial aid and other information. Please note that some requirements will need to be fulfilled on campus, such as the assessment test and applicable lab courses.
International Affairs
860-512-3215
The Office of International Affairs assists international students meet their academic, social and cultural needs while attending Manchester Community College. Also, the office assists international students in meeting their academic and socio-economic goals and objectives with a variety of opportunities that the college has to offer. The office provides information, programs, activities and services to increase international awareness for the community at-large. International students speaking over 50 languages representing over 70 countries have attended MCC and many students transfer to baccalaureate institutions to further their academic and career goals. International students interested in applying to MCC with an I-20 application for F-1 consideration must do so before July 16 for the Fall 2012 semester and December 7 for the Spring 2013 semester. International students interested in attending MCC with an F-1 visa should contact the Director of International Affairs for further information to ensure that their I-20 application is processed in a timely manner for appropriate service or U.S. State Department approval. Official international academic credentials, such as high school and college transcripts, must be in English. These documents may be translated and evaluated by the World Education Services, Inc. (www.wes.org) or an accredited evaluation center, before they are submitted for international student admissions. International application packets are available in the Office of International Affairs or the Admissions office. International students on a visa other than F-1 may enroll for classes at MCC, but they should consult with the office of U.S. Citizenship and Immigration Services (www.uscis.gov) or the Director of International Affairs to verify student eligibility and enrollment status.

Home-Schooled Students
Applicants to Manchester Community College who have completed home schooling must meet the same requirements as any other applicant; these include, but are not necessarily limited to, completing an application; paying the one-time, non-refundable $20 application fee; and submitting proof of measles/rubella, mumps and varicella immunizations. In addition, the applicant must submit either a federal or state equivalency diploma or a summary of the secondary program of study they pursued, and a certificate of successful completion thereof, signed by the parent or other provider of the home schooling. Applicants who have attended a secondary school must also submit a copy of that transcript, whether or not they may have graduated from there. Applicants who are in the process of home schooling, but who have not as yet completed the equivalent of a high school education, should contact the Admissions office at 860-512-3215.

Non-Degree Students
Students who are interested in enrolling in individual credit courses, but who are not interested in pursuing a degree or certificate program, may elect to enroll as non-degree, non-matriculating students. Students applying as non-degree students may complete the Admissions Application and pay the one-time, non-refundable $20 application fee. Non-degree students are not eligible to receive financial aid or veterans benefits. Financial Aid and Deferment of Tuition: Tuition may be deferred at the time of registration only for students who have completed the financial aid process and have been determined eligible for it. All the necessary documents must be on file in the Financial Aid office by May 15 for the fall semester and October 1 for the spring semester (refer to the Financial Aid section)
Transcript Evaluation
Students wishing to transfer course work completed at another college or university, or by CLEP (College Level Examination Program) or other standardized examination, must request that an official transcript of previous college work be sent to the Admissions office. Evaluation of transcripts and awarding transfer credit will be done on a rolling basis. For further information, see Transfer Policies, Course Credit for Prior Learning, and College Level Examination Program.

It is recommended that students planning to enroll in a college transfer program of study meet with a transfer counselor (Counseling Center, L108). It is especially important for students to be informed fully about the requirements of the transfer college or university because of differences in program requirements among institutions.

Assessment Tests
English and mathematics assessment tests are required for all degree and certificate candidates after they have been accepted for admission. Tests must be taken prior to registration. Transfer students having college level mathematics and English credits may be exempted from taking tests in those subjects. Students with SAT verbal/critical reading or writing score of 450 or more, and/or mathematics score of 500 or more are exempt from the assessment test. Proper verification is required. For partial testing, the approved exemption form must be presented to the test administrator before testing. The results of the assessment test will be used to determine the individual’s level of achievement in mathematics and/or English and will determine appropriate class placement. Retesting is not allowed for students who have entered the writing sequence. For more information about assessment testing, call 860-512-3304 or visit the college website at www.manchestercc.edu. The Assessment Testing Exception form is available on the college website in the Form Depot (www.manchestercc.edu/students/form.php) or in the Admissions office.

Business Careers Students: Placement examinations for beginning short-hand or keyboarding will be administered upon request to students who have successfully completed one or more years of shorthand or keyboarding in high school, or who have demonstrated considerable skills in these areas. Students who pass these placement examinations need not take introductory courses. For further information, speak with the Director of the Business, Engineering and Technology Division and the Director of the Social Science and Hospitality Division.

Health Careers Students: Students accepted into Health Careers programs are required to meet with the specific program coordinator to obtain test results and plan course selection.

Online Program Students: Students interested in applying to be admitted to an online degree program are required to complete a student profile and a self-assessment to determine their aptitude for online learning, and to speak with an advisor.

Advanced Placement Program
Advanced placement may be granted to entering students on the basis of scores on the College Entrance Examination Board Advanced Placement Examinations. Scores of 3, 4 or 5 are granted degree credit for equivalent courses as determined by the academic divisions. All paperwork should be submitted to the Admissions office.
### College Board AP Examination Transfer Guidelines

<table>
<thead>
<tr>
<th>AP Exam</th>
<th>Score</th>
<th>Course Equivalents Granted</th>
<th>Credits Granted</th>
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<tr>
<td>Art History</td>
<td>4, 5</td>
<td>ART* 101 and ART* 102</td>
<td>6</td>
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<tr>
<td>Biology</td>
<td>3, 4, 5</td>
<td>BIO* 121 and BIO* 122</td>
<td>8</td>
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<tr>
<td>Chemistry</td>
<td>4, 5</td>
<td>CHE* 121 and CHE* 122</td>
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<td>Computer Science</td>
<td>4, 5</td>
<td>CSC* 226</td>
<td>3</td>
</tr>
<tr>
<td>Macroeconomics</td>
<td>4, 5</td>
<td>ECN* 101</td>
<td>3</td>
</tr>
<tr>
<td>Microeconomics</td>
<td>4, 5</td>
<td>ECN* 102</td>
<td>3</td>
</tr>
<tr>
<td>English Language or English Literature</td>
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<td>ENG* 101</td>
<td>3</td>
</tr>
<tr>
<td>Environmental Science</td>
<td>4, 5</td>
<td>EVS* 100</td>
<td>3</td>
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<td>4, 5</td>
<td>FRE* 111</td>
<td>3</td>
</tr>
<tr>
<td>Geography</td>
<td>4, 5</td>
<td>GEO* 101</td>
<td>3</td>
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<td>Comparative Government &amp; Politics</td>
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<td>U.S. Government &amp; Politics</td>
<td>4, 5</td>
<td>POL* 111</td>
<td>3</td>
</tr>
<tr>
<td>American History</td>
<td>4, 5</td>
<td>HIS* 201</td>
<td>3</td>
</tr>
<tr>
<td>European History</td>
<td>4, 5</td>
<td>HIS* 101</td>
<td>3</td>
</tr>
<tr>
<td>World History</td>
<td>4, 5</td>
<td>HIS* 121</td>
<td>3</td>
</tr>
<tr>
<td>Mathematics BC</td>
<td>4, 5</td>
<td>MAT* 254 and MAT* 256</td>
<td>8</td>
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<tr>
<td>Music</td>
<td>4, 5</td>
<td>MUS* 101 and MUS* 102</td>
<td>6</td>
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<td>Physics B</td>
<td>4, 5</td>
<td>PHY* 121 and PHY* 122</td>
<td>8</td>
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<tr>
<td>Physics C Elec &amp; Magnet</td>
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<td>PHY* 222</td>
<td>4</td>
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<td>Physics C Mechanics</td>
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<td>PHY* 221</td>
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<td>Psychology</td>
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<tr>
<td>Spanish Language</td>
<td>4, 5</td>
<td>SPA* 111</td>
<td>4</td>
</tr>
</tbody>
</table>
MCC International Baccalaureate Academy Courses

Manchester Community College recognizes the IB Diploma Program and will consider for course credit and advanced placement any higher level IB subject in which a grade of 5 or higher has been earned. Credit is awarded at the discretion of individual departments through the Admissions office.

Re-Admission

Students who have been accepted and enrolled in a degree or certificate program of study at MCC should submit a re-admission form if progress towards completion of their program has been interrupted by an absence from the college of more than two years. Students will be required to follow the requirements of the catalog effective at their readmission. (Please note: students applying for re-enrollment into Health Careers programs will be placed in the General Studies Health Careers pool pending reapplication and acceptance to the specific Health Careers program.) It is not necessary to submit a new set of credentials or another $20 admissions application fee with the re-enrollment form. However, students who attend another college during an absence from MCC must submit an official transcript of those studies to the Admissions office in order to receive credit at MCC.

Cross-Registration Privilege

A cross-registration privilege exists for students who register for General Fund courses at multiple colleges within the state system of higher education. A student who has proof of payment for the maximum full-time tuition at their “home” institution is exempt from further charges at a state university, the University of Connecticut or another community college. A student who has paid the tuition and fees of a part-time student at their “home” institution and registers for additional courses at another college shall not exceed the amount charged for a full-time student, if the student’s combined registration at both institutions would classify them as a full-time student. If you are a financial aid recipient and you are attending another higher education institution at the same time, please see the Financial Aid office. This exchange privilege is offered on a space-available basis only. Connecticut community college students can register any time during in-person registration. All students interested in this special cross-registration plan should contact the Registrar’s office.

Measles, Mumps, Rubella and Varicella (Chicken Pox) Immunizations

Students born after December 31, 1956: Connecticut State Law requires that all incoming full-time (degree seeking and non-degree/non-matriculating) and part-time matriculating students enrolled in postsecondary schools be adequately protected against measles, mumps, rubella and varicella. The first dose must be given on or after the first birthday and the second at least one month later to insure adequate immunization. Health Careers students may be required to have additional immunizations. Further information is available in the Registrar’s office.
New England Regional Student Program
Manchester Community College is a member of the New England Regional Student Program. The program provides an opportunity for students to earn an undergraduate degree in certain programs not offered at a college near their home or in their home state. Under this program, an out-of-state student will be charged the regular resident tuition plus a 50% surcharge. Ask the Admissions office for further information about this program.

High School Partnership Program
The High School Partnership Program provides the opportunity for a high school junior or senior to enroll in college-level courses (eight credit maximum) at no cost. Students must have a strong academic background; at least a “B” average; meet the course pre-requisites and have a written recommendation from their guidance counselor to participate in the program. The high school must have a signed partnership contract on file with the College. Students are responsible for their books and transportation. The purpose of the program is to give students who are capable of college-level work the opportunity to take courses which are of interest to them. Priority registration is given to students enrolling in STEM courses - science, technology, engineering and mathematics, to broaden the students’ educational experience and career opportunities while responding to the demands of Connecticut’s high-skill growth industries for an educated workforce with solid grounding in these disciplines. Students interested in registering for any other college-level course are allowed to register on the day before classes begin, on a space available basis only. Students must submit a High School Partnership application, which is available through the participating high school guidance office or in the MCC Admissions office. Registration is conducted in-person only; online applications or registrations are not acceptable.

College Career Pathways Program
The College Career Pathways program is a combined secondary and post-secondary educational program that allows students in high school to obtain advanced standing by earning college credits in certain business, occupational and technology courses at MCC. This is a formal articulation program between MCC and a consortium of area high schools. High school students must follow guidelines for admission to the College Career Pathways program as established by their high school and MCC. Students will take the College Career Pathways courses at their high schools in the 10th, 11th and 12th grades. Upon successfully completing the high school portion of the program and graduating from high school, the student can complete the program at MCC. The student has the opportunity to earn up to 14 college credits by the end of his/her senior year of high school. The student must meet the same college level standards that are expected of students attending MCC. Please contact the Admissions office or a high school guidance counselor for application information.

Veterans
Veterans are served by the staff in the Veterans O.A.S.I.S. in the Lowe Student Services Center, L-101 and Career Services & Veterans Services office in the Lowe Student Services Center, L-120. A School Certifying Official (SCO) will assist eligible veterans each semester with the required processes and procedures for receiving monthly benefits, tuition waivers, and other educational benefits.
All veterans seeking monthly benefits must be matriculated into a degree or certificate program. Only courses that are directly applicable to their degree program will count towards eligibility.
for monthly benefits. Veterans that are transfer students must request an official transcript to be sent to the Admissions office for evaluation of prior credit. The college may award credit for certain courses completed during military service including Military Occupational Specialty (MOS) proficiency. Veterans may submit course completion documents, other appropriate evidence of military training, and qualifications to the Admissions office for evaluation. Veterans are reminded that credit can also be earned through the College Level Examination Program (CLEP). Information about CLEP exams can be obtained from the Admissions office or at the College Board website at www.collegeboard.com. Veterans who are eligible to receive educational benefits must complete the VONAPP located on the www.gibill.va.gov website, and submit their DD 214 to the SCO. If a member of the CT National Guard, the student must request through his/her Unit Education Officer a Notice of Basic Eligibility (NOBE) prior to the start of classes in order to receive benefits. In addition, veterans are eligible for a full tuition waiver for General Fund courses if they were: a. honorably discharged or released under honorable conditions from active service; b. on active duty for at least 90 days during specific periods of conflict. Tuition waivers cover only the cost of tuition for General Fund credit-bearing courses. They do not cover expenses associated with books, supplies, or student fees. In addition, they do not cover Extension Fund courses such as College by Design classes, winter intersession classes, or summer classes. Students withdrawing from courses are required to notify the School Certifying Official as soon as possible. This will allow for the SCO to promptly notify the VA and avoid overpayment of benefits to the student. Veterans are responsible for satisfactory pursuit of the courses in which they register and for notifying Veterans Services of any change in status. For more information, please call 860-512-3362.

**Vocational Rehabilitation Benefits (Chapter 31)**

Vocational Rehabilitation Benefits (Chapter 31) are available for veterans who have a service-related disability of 20 percent or more. Students can ascertain their eligibility for vocational rehabilitation benefits by calling the VA office in Newington at 1-800-827-1000. Chapter 31 benefits provide eligible students with a monthly stipend and all costs for tuition. Books and supplies are also covered by the VA.

**Post 9/11 G.I. Bill Benefits (Chapter 33)**

The Post 9/11 Veterans Educational Act of 2008 program, Chapter 33, provides up to 36 months of educational services. Based on the length of active duty service, veterans may be entitled to a percentage of tuition and fees, a monthly housing allowance and a yearly book stipend. For more information, please call 860-512-3362.

**Dependents Educational Assistance (Chapter 35)**

Dependents Educational Assistance provides education and training opportunities to eligible dependents of certain veterans. If you are interested in these benefits, please contact the Veterans Services office at 860-512-3362.

**Great Path Academy**

Great Path Academy is a middle college high school enrolling more than 275 students in grades 9-12, located within the campus of Manchester Community College. The school is an inter-district magnet school managed on behalf of the college by Hartford Public Schools, and its member towns include Bolton, Coventry, East Hartford, Glastonbury, Granby, Hartford,
Manchester and Tolland. Students who live in other towns may apply through Parent Choice. All students are selected through a blind lottery. The Governing Board, which is chaired by the President of MCC ex-officio, consists of the Board chairs, the superintendents of the participating districts and college representatives.

The middle college high school theme provides students with an accelerated program through which they may enroll in up to eight credits per semester in direct college classes and through courses articulated with MCC through the Career Clusters program. Last year, the average student earned twenty-four college credits at no expense to the family. Over the past three years, 97% of students have graduated and enrolled in post-secondary education.

The high school building opened in 2009 and is connected to the Lowe Student Services Center. The building features eighteen classrooms, including three science labs, a language laboratory, culinary arts classroom, art room, graphic design studio and gymnasium. For more information call 860-512-3702.

## Fees and Refund Policies

### Connecticut Community College Schedule of Fees

Tuition and fees are subject to change. At the time of registration, all students are required to pay their fees.

**General Fund Tuition and Fees**

General fund tuition and fees are payable in advance in accordance with deadline dates announced each semester.

The following is a complete schedule of tuition and fees, prepared by the Board of Regents for Higher Education, effective Fall 2013.

**Excess Credits Tuition Charge** - An additional flat tuition charge of $100 per semester applies when total registered credits exceed 17 for the semester.

### Connecticut Residents Tuition & Fees, Per Semester

<table>
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<th>Semester Hours</th>
<th>Tuition (1 + 2)</th>
<th>College Services Fee‡ (3)</th>
<th>Student Activity Fee‡ (3)</th>
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<td>10.0</td>
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<td>$522.00</td>
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<td>11.0</td>
<td>$4,620.00</td>
<td>$567.00</td>
<td>$5.00</td>
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</table>

‡ $66.50 tuition per additional half credit

Non-Resident Rates Tuition & Fees, Per Semester

Residency for in-state tuition purposes: an emancipated person must have resided in this state for a period of not less than one year prior to the first day of the semester.
<table>
<thead>
<tr>
<th>Semester Hours</th>
<th>Tuition (1)</th>
<th>College Services Fee‡ (3)</th>
<th>Student Activity Fee‡ (3)</th>
<th>Total</th>
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<tr>
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<td>$210.00</td>
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<tr>
<td>2.0</td>
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<tr>
<td>8.0</td>
<td>$1,680.00</td>
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<tr>
<td>9.0</td>
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<td>$10.00</td>
<td>$2,834.50</td>
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</tbody>
</table>

‡$99.50 tuition per additional half credit
‡‡$99.75 tuition per additional half credit

**Additional Mandatory Usage Fees, Per Semester**

- **Laboratory Course Fee**: $82.00 Per registration in a designated laboratory course
- **Studio Course Fee**: $88.00 Per registration in a designated studio course
- **Clinical Program Fee- Level 1**: $281.00 Per semester (Fall & Spring only) Level 1 allied health programs
Clinical Program Fee - Level 2 $201.00 Per semester (Fall & Spring only) Level 2 allied health programs

Extension Fund Tuition and Fees
(for more information, see Credit Extension and Credit-Free catalogs)
Extension Fund student - credit (tuition per semester hour.)
See Continuing Education catalogs for fee schedule.
Regular academic year, 2013-2014 \(^{(1)}\) $152.00
Summer session, 2013 $144.00
On-campus, weekdays, weekend, regular semester \(^{(4)}\) $152.00

Extension Fund student - credit-free (rate set on a per course basis, depending upon course offered)

Special Fees
- Application Fee \(^{(5)}\)
  Full-time student $20.00
  Part-time student $20.00
- Laboratory Course Fee $78.00
  (Per registration in a designated laboratory course)
- Studio Course Fee $85.00
  (Per registration in a designated studio course)
- Clinical Program Fee-Level 1 (Per semester [Fall & Spring only] - Level 1 allied health programs). $269.00
- Clinical Program Fee-Level 2 (Per semester [Fall & Spring only] -Level 2 allied health programs) $193.00
- Program Enrollment Fee \(^{(6)}\) $20.00
- Late Registration Fee $5.00
- Graduation Application No Charge
- Transcripts No Charge
- Installment Payment Plan $25.00
- Late Tuition/Fee Payment $15.00
- Returned Check Fee $25.00
- Replacement of Lost ID card $1.00
- CLEP Examination Fee \(^{(7)}\) – For general or subject exams

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Manchester Community College – Catalog – 2013-2014
One exam. $60.00
Each additional exam, same month $60.00

- Academic Evaluation Fee $15.00
- TV course student - per course (3 credit hours) $7.25
  ‡‡ In addition to applicable tuition
- Portfolio Assessment Fee $50.00

**Fee Deposit - Non-Refundable**

Full-time and part-time students must pay a non-refundable deposit of all fees applicable to the courses for which registered at the time of registration, including courses for audit, exclusive of tuition. The total tuition applicable to the courses for which registered, including courses for audit, is payable in one installment and is due six weeks before the first day of classes unless a deferred payment schedule, in accordance with approved college policy, has been approved.

**Installment Payment Plan**

An Installment Payment Plan is available to students who are registered for a minimum of six semester hours. Students may apply for an installment payment plan at the time of registration. There is a $25 non-refundable fee for participation in the plan.

**Footnotes:**

1. Students enrolled in General Fund Tuition courses and/or Educational Extension Fund courses carrying 12 semester hours or more will be classified as full-time students for general fee purposes.
2. Waivers:
   a. Complete waiver of tuition for dependent child of person missing in action or former prisoner of war. For more information on Veteran and National Guard waivers, see Veterans in Admissions.
   b. Senior Citizens, qualified veterans and the children of certain veterans. (General Fund Classes Only)
      Students age 62 or older may register with a general fund in-state tuition, college service fees and student activity fees waiver on the last day of Walk-In Registration. Proof of age and a registration form must be submitted to the Registrar’s office to complete the eligibility requirements for this waiver.
   c. Tuition may be waived or remitted by the President, or her designated appointee, for any in-state student who demonstrates substantial financial need and who is enrolled on a full-time or part-time basis in a degree or certificate program or a pre-college remedial program.
   d. Tuition shall be waived for any student attending the Connecticut State Police Academy who is enrolled in a criminal justice program at the Academy that is offered in coordination with a regional community college that accredits courses.
taken in the program. This waiver applies only to courses taken at the Connecticut State Police Academy and not to course work required for a degree taken at the college.

e. The tuition fees of any eligible member of the Connecticut Army or Air National Guard shall be waived. To be eligible for such waiver, a member of the Connecticut Army or Air National Guard must (1) be a resident of Connecticut, (2) present certification by the Adjutant General or his designee as a member in good standing of the Guard, and (3) be enrolled or accepted for admission to a regional community college on a full-time or part-time basis in a degree granting program. The tuition waiver shall be reduced by the amount of any educational reimbursement received from an employer.

f. The Community College Presidents are authorized to waive the Student Activity Fee only for students enrolled in Tuition Fund-financed courses offered at off-campus locations.

3. General Fees are applicable to both Tuition Fund and Extension Fund students, except the TV course and courses by newspaper.

4. On-campus Extension Fee: rate applies to on-campus Extension Fee courses that permit the college to enroll additional students beyond the level supported by the General Fund.

5. Not applicable for the following: (a) CONNTAC applicants, (b) Upward Bound applicants and (c) needy and deprived students as determined by college.

6. Not applicable if student paid the $20 application fee.

7. CLEP exam fees are payable to College Level Examination Board and are not deposited or held in state accounts.

College Presidents, with the approval of the Chancellor, are authorized to waive general and special fees of students enrolled in special programs when the circumstances justify such action.

**Refund Policies**

**Course Cancellations**
If the college cancels a course, students will automatically be granted a 100% adjustment of associated charges except the application fee.

**Tuition, Laboratory and Studio Fees**
- If students officially drop prior to the 1st day of the semester—100% refund
- If students officially drop on the 1st day of the semester through the 14th calendar day—50% refund
- If students officially drop/withdraw on the 15th day of the semester or later—no refund

**College Service, Student Activity & Clinical Fees**
No Refund—Students may request a full refund of the clinical fee if they drop out of an allied health program entirely or are not enrolled in any credit courses at the end of the add/drop period.

**Extension Fees**
Fees for Summer, Winter and Accelerated sessions, and Corporate and Continuing Education credit and non-credit courses.

- If students officially drop on the last business day before the first class meeting or prior—100% refund of tuition only. Requests for refund must be made by Friday for courses starting Saturday-Monday.
- If students officially withdraw on the day of the first class meeting or later—no refund

**Other Non-Refundable Fees**

- Installment Plan
- Late Payment

Note:
1. Refund policies assume that all charges have been paid in full prior to drop/withdrawal. In some cases, an account adjustment may not entitle a student to an actual refund.
2. Students are required to officially drop class(es) by the official deadline published each semester in the Enrollment Guide.
3. Deadlines for Summer, Winter and Accelerated sessions are based on the start date of courses and are adjusted appropriately.
4. Refund/returns of Title IV funds are made in accordance with applicable Federal rules and regulations that take precedence over college refund policies.

**Financial Aid Students**

If students drop or withdraw, they may be subject to a financial aid award reduction. This can result in a student personally owing money to the college. Students should contact the Financial Aid office at 860-512-3380 before reducing their course load.

**Installment Plan for Students**

Students may still owe a balance on their Installment Plan even though they have reduced their course load or withdrawn. Students should contact the Bursar’s office at 860-512-3637 first to determine the effect on their balance.

**All Students**

Once the regular semester begins, the Registrar’s office requires the students to make all schedule changes in person. Students will not be able to reduce their course load on myCommNet.

**Frequently Asked Questions**

**I dropped my class before it even met. Why did I receive only a partial refund?**
College service and student activity fees are non-refundable. Tuition charges are 100% refundable but only if you drop your class before the first day of the semester, which may take place before the first day of your class.

**I never attended my class. Do I really still owe the charges?**
Yes, you do still owe the charges. Charges are based on the number of credits you register for, not the number of credits you complete. Failure to attend is not considered an official drop or withdrawal. Once you register, you are obliged to pay for all charges whether you attend the class or not.

In addition, these courses frequently result in a grade of “F”, which can lead to probation or suspension status (see Academic Policies).

**My charges didn’t change even though my status changed from full-time to part-time. Why?**
Reducing your course load does not entitle you to an automatic refund. Some charges are non-refundable while others are only 50% refundable if you officially drop the class by the published deadlines (first 14 calendar days of the semester).

**When and how do I receive my refund?**

Refunds are automatically paid by check at the end of the official add/drop period or, if receiving financial aid, after disbursement date unless you direct us otherwise. Checks are processed in Hartford and mailed to your permanent mailing address on file in the Registrar’s office. Please verify your address when you drop/withdraw to assure prompt payment.

**Policy Appeal Procedures**

Students are required to officially drop/withdraw prior to submitting an appeal. Appeals will only be considered for the following extraordinary circumstances: severe illness documented by a physician’s certificate, administrative error by the college, or military transfer documented by a copy of transfer orders.

Note: The following circumstances will not be considered: change in employment situation, misunderstanding of start date or dates of class, inability to transfer course, normal illness, transportation issues, childcare issues, poor decision or change of mind by student regarding course selection, or dissatisfaction with course content or instructor. Both tuition and fees cannot be transferred or applied towards the next semester.

All appeals must be submitted in writing to the Refund Appeals Committee and include Banner ID, contact information and appropriate documentation. Appeals must be received within ten days of the official start date of the course to be considered. Forms are located in the Form Depot at www.mcc.commnet.edu or can be obtained from the Registrar’s office. The committee meets twice per month. Students will receive a written response notifying them of the outcomes.

All refund requests should be submitted to the Refund Appeals Committee, Registrar’s office, L157, Lowe Student Services Center, MS #13, P.O. Box 1046, Manchester, CT 06045-1046.

**More Questions? We Can Help!**

Students can view their account and financial aid award, make payments, etc. at http://my.commnet.edu.

Bursar’s office: L165, Lowe Student Services Center, 860-512-3637
Financial Aid office: L177, Lowe Student Services Center, 860-512-3380
Registrar’s office: L157, Lowe Student Services Center, 860-512-3220

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**Financial Aid**

**Financial Aid**

**860-512-3380**

The Financial Aid program at Manchester Community College is designed to provide access for as many eligible students as current funding will allow. The prime objective of the Financial Aid program is to meet the basic expenses of tuition, fees and books. In addition, many recipients qualify for refund checks that repay their initial expenses for supplies and transportation costs. Also, many other students are eligible for work-study and student loans to more fully meet their expenses for room, board, transportation, and personal and child care costs.

**Estimated Budgets for 2013-2014 Award Year**
### Budget 1: In State - Living with Parents (Full-Time Student)

<table>
<thead>
<tr>
<th>Item</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tuition &amp; Fees</td>
<td>$3,786</td>
</tr>
<tr>
<td>Books &amp; Supplies</td>
<td>1,200</td>
</tr>
<tr>
<td>Transportation</td>
<td>1,480</td>
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<td>Room &amp; Board</td>
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<td>Personal Misc.</td>
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<tr>
<td><strong>Total</strong></td>
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</table>

### Budget 2: In State - Not Living with Parents (Full-Time Student)

<table>
<thead>
<tr>
<th>Item</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tuition &amp; Fees</td>
<td>$3,786</td>
</tr>
<tr>
<td>Books &amp; Supplies</td>
<td>1,200</td>
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<tr>
<td>Transportation</td>
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<tr>
<td>Room &amp; Board</td>
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<tr>
<td><strong>Total</strong></td>
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</table>

### Basic Eligibility Criteria:

To be eligible for financial aid, a student must:
- Be a citizen or eligible non-citizen of the United States;
- Declare an eligible degree or certificate program (audited courses do not count towards enrollment status);
- Have a high school diploma or its equivalent on file at the Admissions office;
- Be registered with Selective Service, if male; and
- Be in academic good standing and maintaining satisfactory progress according to federal regulations.

### How to Apply:

1. Apply on the web at www.fafsa.gov or call to request the Free Application for Federal Student Aid (FAFSA) Form at 1-800-4-FED-AID (1-800-433-3243). In order for us to
receive your application information from the processor, you must include MCC as one of the colleges you plan to attend. The Title IV code for MCC is 001392.

2. Declare an eligible degree program through the Admissions office.

3. Submit tax transcripts and any other required documentation to the Financial Aid office in a timely manner, if required.

4. Log on to myCommNet at http://my.commnet.edu to check your status and to accept your financial aid award package. This link also lets you know if you have any items pending.

5. At the myCommNet site, complete the Title IV authorization to be able to buy your books with your financial aid, if you have extra funding after covering tuition and fees.

**Deadlines**

- Priority is given to early, accurate financial aid applications.
- To ensure timely consideration, you should have your paperwork on file in the Financial Aid office by May 15 for the fall semester and October 1 for the spring semester.
- After these dates, applications will be processed on a rolling basis throughout the year.

**Deferment of Tuition**

Students who are financial aid-eligible and have met all the necessary requirements (see *How to Apply* above) by May 15 for the fall semester and October 1 for the spring semester will be entitled to a deferment of their tuition and fees.

A student who is entitled to a deferment of their tuition and fees will not be required to pay by the tuition due date. Instead, the Bursar’s office will be notified electronically of the student’s financial aid award, before the tuition due date. Tuition and fees due to the college will be deducted from their financial aid award. Also, under certain conditions, you may have to pay the amount due at a later date. These conditions include, but are not limited to:

- failure to respond in a timely manner to requests for missing information;
- withdrawal from any or all courses;
- unsatisfactory academic progress;
- a final review of the application that results in your not being eligible for aid;
- non-attendance of courses; and
- attending classes outside curriculum.

**Student Loans**

- Students who are applying for a loan must also complete the FAFSA form at www.fafsa.gov.
- Students are advised to wait for a complete review of their eligibility for other forms of financial aid before submitting loan applications.
- Student Loan Applications are available in the Financial Aid office. This application must be completed and submitted to the Financial Aid office.
- The deadline for submission of student loan applications is October 1 for the fall and March 1 for the spring.
• Students who are on warning or enrolled in developmental courses are not eligible for a student loan. Verification of enrollment is required to disburse loan funds.

**Winter and Summer Sessions**

Financial aid does not cover winter intersession courses. Summer aid other than Pell grants may be available depending on funding. However, students who are eligible for the Pell grant may receive summer aid if they are making satisfactory progress. Please see the Financial Aid staff for more details.

**Book Purchases**

Students who are financial aid recipients may be eligible to receive a book credit. Eligibility is based on the amount of financial aid awarded. Check with the Financial Aid office at 860-512-3380 if you have any questions or concerns.

**Disbursement**

Financial aid refunds are processed after students have accepted their award and money has been disbursed. This process cannot begin until the registration and course adjustment periods are over. The amount of the refund would equal a student’s financial aid award (excluding college work study and student loans), minus anything owed to the college such as tuition, fees, book credits or Child Development Center expenses. The refunds are disbursed by the Bursar’s office. Sometime between the middle and the end of the semester, reimbursement checks will be electronically deposited or mailed to students who are entitled to financial aid.

**Satisfactory Academic Progress Policy for Student Financial Aid Recipients**

In order to be eligible for financial aid, students must maintain satisfactory progress as defined by the policy approved by the Connecticut Community Colleges, adhering to federal regulations. Students who are not maintaining satisfactory progress will be placed on **Warning** status for one semester, at which time they will continue to be eligible for financial aid. Students must pass all classes during the warning semester in order to remain eligible for financial aid. If students do not maintain satisfactory progress during the warning semester, they will be denied aid the following semester. However, students may appeal for consideration for reinstatement of their financial aid if there were extenuating circumstances that affected successful progression. All appeals must be supported by documentation. If the appeal is approved, students will be given a **Probation/Waiver** status for financial aid when they would become eligible. Students’ progress will be evaluated every semester and their status communicated to them.

**Maximum Credit Hours**

A student may receive financial aid for any attempted credits in his/her program of study that does not exceed 150% of the published length of the student’s educational program at the college. For example, a student enrolled in a 60-credit degree program may receive financial aid for a maximum of 90 attempted credit hours. Similarly, a student enrolled in a 30-credit certificate program may receive financial aid for a maximum of 45 attempted credit hours. Any attempted credits at the college, as well as transfer credits, must be included in the calculation. The 150% maximum credit hours rule is applicable to students who change majors or who pursue a double major.
Title IV Federal Financial Aid: Policy for Return of Title IV Funds

1. Any student who is attending MCC and is receiving student financial assistance under the federal Title IV Programs may be entitled to a refund if they completely withdraw from their program. The percentage of the period that the student remains enrolled is derived by dividing the number of days the student attended by the number of days in the period. Calendar days are used, but breaks of five consecutive days are excluded from both the numerator and denominator. The refund shall be less an administrative fee which is not to exceed the lesser of 5% of the tuition, fees and other charges assessed the student, or $100.

2. During the first 60% of the period, a student ‘earns’ Title IV funds in direct proportion to the length of time he or she remains enrolled. That is, the percentage of time during the period that the student remains enrolled is the percentage of disbursable aid for that period that the student earned. A student who remains enrolled beyond the 60% point earns all aid for the period.

3. Students who withdraw from a program are subject to a calculation that determines the amount of money that students may be required to pay back to the college or the federal government. This calculation will be in accordance with formula and guidelines established by prevailing federal regulations, and funds will be allocated in the following order (not to exceed the original allotment from each source): Federal Direct Loan Program (unsubsidized and subsidized), Federal Pell Grant, Federal Supplemental Education Opportunity Grant and other funds.

Verification Procedures

You may be selected by the Department of Education for a process called verification, in which case you will be required to submit certain documentation in order for processing to continue on your financial aid application. Students will be notified of the documentation required when the information is received electronically by the Financial Aid office. This information is also available at http://my.commnet.edu. Failure to submit completed verification documents to the Financial Aid office can result in:

- Loss of financial aid for the semester or the entire academic year;
- Loans not being approved;
- Future applications for financial aid not being processed; and
- Outstanding debt with MCC and/or the federal government.

Helpful Hints for Applicants

1. Apply early.
2. Read instructions on the FAFSA website very carefully before completing the application. Have a copy of your previous year’s tax return at-hand before starting the process.
3. Be prepared to set up a payment plan with the Bursar’s office, if financial aid has not been determined at the time of registration.

4. Keep the Financial Aid office informed of any changes in enrollment status. Remember that audited courses cannot be covered by financial aid programs and could put you in a repayment situation.

5. Keep your mailing and email address current with the Financial Aid and Registrar’s offices. Financial aid will contact you through your email address.


**Financial Aid Programs**


**Additional Information**

Additional information about all federal programs and federal regulations is provided on the Financial Aid office web page as well as in the annually updated Federal Student Aid Guide. This guide is available in the Financial Aid office as well. The Financial Aid office is located in room L177 in the Lowe Student Services Center.

**MCC Foundation Scholarships**

The MCC Foundation provides scholarships for both full- and part-time students. This past year, the Foundation distributed 100 scholarships and over $100,000 to MCC students. Basic criteria include financial need, community service and a grade point average of 3.0 or better/or an indication of steady academic progress. Application deadlines are April for the fall semester and November for the spring semester. For information on the MCC Foundation Scholarships, contact Endia DeCordova in the Office of Institutional Development at 860-512-2902.

**Academic Policies**

**Academic Honors**

To encourage and recognize academic excellence, Manchester Community College has established a President’s List and a Dean’s List.

- The President’s List recognizes the exceptional scholarship of students who earn a 4.0 or “A” grade point average in their courses. Full-time students who have completed at least 12 credits for the semester with no “W” or “I” grades are eligible for this honor.
- Once a part-time student has accumulated 12 credits in residence, that student may be considered for the Part-Time President’s List. Part-time students who have earned a 4.0 GPA with no “W” or “I” grades in a given semester are eligible for the Part-Time President’s List.
• Students enrolled in three credits or more and who have earned a GPA of 3.4 are eligible for the Dean’s List. Students who have earned a 3.4 GPA with no “W” or “I” grades in a given semester are eligible for the Dean’s List.

An official withdrawal or incomplete grade for any class during the semester will make the student ineligible for semester honors. However, once a grade is assigned upon completion of the course work in accord with specific guidelines, and a new grade point average calculated, any honors for which the student is eligible may be entered retroactively on the student’s academic record.

**Phi Theta Kappa**

Students who have established a GPA of 3.5 or above and have earned 12 credit hours at MCC are extended an invitation to join Phi Theta Kappa. Phi Theta Kappa is the only internationally acclaimed honor society for colleges offering associate degree programs. Membership in Phi Theta Kappa offers students opportunities for leadership, fellowship, scholarship and community service, as well as providing an intellectual climate for continued academic excellence. Phi Theta Kappa members in good standing (have at least a 3.5 GPA when graduating) may wear the organization’s gold tassel, stole and blue/gold honors cord during commencement.

**Graduation Honors**

For those graduating students who are earning an associate degree only.

- **3.9 to 4.0 GPA** – Summa Cum Laude (Gold Cord)
- **3.7 to 3.89 GPA** – Magna Cum Laude
- **3.4 to 3.69 GPA** – Cum Laude

An incomplete grade for any class during the semester will make the student ineligible for honors at graduation. However, upon completion of the course work, if the student has earned the required grade point average, the appropriate level of recognition will be noted on the student’s official transcript.

**Valedictorian and Salutatorian**

Graduating students who have completed at least 30 credits at Manchester Community College are eligible for consideration as valedictorian or salutatorian. Among the eligible students, the student with the highest cumulative GPA will be designated the valedictorian and the student with the second highest cumulative GPA will be named the salutatorian. In the case of identical averages, the student with the larger number of credits from MCC will be the valedictorian. If the GPAs and the number of credits taken at MCC are the same for two students, the pair will be named co-valedictorians.

**The Board of Regents Medallion**

The Board of Regents Medallion is awarded at each of the twelve community colleges to graduating students who have earned perfect 4.0s and who have completed at least half of their requirements at the college where the degree is being awarded. Certificate programs are not included for this award.

**Academic Standing**

Students enrolled at the college must maintain minimum academic progress to be considered in good standing. Students should check their transcripts online on myCommNet. There are two academic policies: 1. Satisfactory Progress and Grade Point Average (GPA).

1. **Satisfactory Progress**
The calculation of Satisfactory Progress is based on the satisfactory completion of a minimum of 50% of all credits (not courses) taken at the college. Students who do not maintain a 50% completion rate earn Progress Probation. Non-completion annotations include F, F#, I, W and N on courses that have been graded.

For example, if a NEW student takes four three-credit courses this fall and receives grades of C, B, F and W, then the calculation will be: 12 credits – 6 credits = 50% completion rate. The student will be in good standing because they have successfully completed a minimum of 50% of total credits.

(Total cumulative credits – Credits that have been graded as non-completions) / Total cumulative credits = Good Standing

Students who have three consecutive semesters of Progress Probation will have a hold placed on their account and must make an appointment with the Student Retention Services office at 860-512-3303 for academic counseling before registering for subsequent semesters.

Students who have four consecutive semesters of Progress Probation have earned Progress Suspension status for a minimum of one 15-week semester.

**Satisfactory Progress Suspension**

Students returning to MCC after a minimum of one 15-week semester of Progress Suspension may apply for reinstatement at the Office of Student Retention Services. Appointments may be made by calling 860-512-3303. Suspension status remains in effect for each subsequent semester until the 50% balance of Satisfactory Progress is attained.

**Request for Reinstatement**

Students have the option to appeal their warning, probation and suspension status for special circumstances. Special circumstances may include, but are not limited to, obligations of employment, military duty or medical problems. Documentation may be required. Appointments to request reinstatement should be made in person by the student by calling the Student Retention Services office at 860-512-3303.

**2. Grade Point Average**

The table below depicts grade point averages for the various academic standing categories. Academic standing is calculated based on cumulative GPA hours (rather than attempted hours). Grades included in the calculation of academic standing are A, A-, B+, B, B-, C+, C, C-, D+, D, D-, F, I. Academic standing will be recomputed upon completion of any course in which an “I” incomplete grade is received.

<table>
<thead>
<tr>
<th>Cumulative GPA Hours</th>
<th>Overall GPA</th>
<th>Academic Standing</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 – 11</td>
<td>0.0 – 1.49</td>
<td>Warning</td>
</tr>
<tr>
<td>0 – 11</td>
<td>1.5 – 4.0</td>
<td>Good Standing</td>
</tr>
</tbody>
</table>

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Students who have completed 11 or fewer credits and whose cumulative grade point average (GPA) falls below 1.5 have earned GPA warning status and are limited to 12 credit hours for the following semester.

**GPA Probation**
Students who have completed 12-30 credit hours and whose cumulative grade point average (GPA) falls below 1.7 have earned GPA probation status and are limited to 11 credit hours for the following semester. Students on GPA Probation who, at the close of the following semester in which the student is registered, have not attained the overall GPA to move back into good standing have earned Suspension status for a minimum of one 15 week semester.

**GPA Suspension**
Students returning to MCC after a minimum of one 15-week semester may apply for reinstatement at the Student Retention Services office. Appointments may be made by calling 860-512-3303.

**Fresh Start Option**
Students who are re-admitted to MCC after an absence of two or more years (four academic semesters of Fall, Spring, Fall, Spring) who have been suspended or are on probation, and who have a poor academic record of less than a 2.0 grade point average, are eligible to apply for the Fresh Start Option. Application must be made within one year of being re-admitted to the college. A student re-admitting under this option will be given the equivalent of transfer credits for all courses taken at MCC with a grade of C- or higher. The earlier grades will remain on the transcript, but all future calculations of GPA will include only courses taken after re-admission under the option. The Fresh Start Option may be used only once by the student and is subject to the existing residency requirement of 15 credits. Eligible students may apply for the Fresh Start Option by meeting in person with the Director of Student Retention Services in room L127, Lowe Student Services Center. Call 860-512-3303 for information or an appointment.

**Enrollment and Withdrawal**

**Changes in Schedule, Major, Status**
Change of Schedule: Students are permitted to add and drop courses during scheduled add and drop periods in the Registrar’s office.
Change of Major: Students who want to change their major should consult a member of the academic advising staff. Change in Curriculum forms are located in the Registrar’s office and are available online in the Forms Depot by going to www.mcc.commnet.edu/students/form.php.
Change of Status: Credit-free students may become degree students by applying for a change of status at the Admissions office. An official application, a $20 application fee, a high school transcript reflecting date of graduation and, if applicable, proof of measles/rubella, mumps and varicella immunization are required. In addition, official transcripts from college(s) attended should be sent directly to the Admissions office. A copy of a secondary equivalency certificate or general education diploma (GED) should be submitted if an individual has one of these instead of a high school diploma.

**Withdrawal from Courses**

- Before two-thirds of the semester: A student who withdraws from any course(s) must obtain a withdrawal form from the Registrar’s office, and return the completed form to the Registrar’s office. Grades for courses from which a student withdraws during the first two-thirds of the semester will be recorded as “W” at the end of the semester.

- After two-thirds of the semester: A student who wishes to withdraw from a course(s) must obtain an Instructor Approval Course Withdrawal Form from the Register’s, Academic offices, or online in the Form Depot. This form must be approved and signed by the instructor and returned to the Registrar’s office by the last day of finals. If the withdrawal is approved, a “W” will be recorded on the student’s transcript. If a student stops attending and fails to withdraw officially from a course, a grade of “F” may be recorded on the student’s transcript. In all cases of withdrawal, a “W” does not affect the student’s grade-point average.

**Withdrawal from the College**

A student who withdraws from the college must complete a withdrawal form at the Registrar’s office. Failure to officially withdraw in writing from the college may result in failing grades for uncompleted courses and might result in probation or suspension status (Academic Policies).

**Grades**

**Unit of Credit**

A credit hour is the unit of credit students earn at MCC. One credit hour usually corresponds to one 50-minute class meeting each week for 15 weeks. A course worth three hours of credit, therefore, usually requires three 50-minute class meetings plus additional work outside the class each week.

**Grades and Grade Points**

Letter grades are assigned to inform students how well they have learned the material in their course(s). For each letter grade there is a corresponding number called grade points. These grades are used to get a numerical expression of a student’s work. The table below shows the grades and their grade point equivalents.

<table>
<thead>
<tr>
<th>Grades</th>
<th>Grade Points</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>= 4.0</td>
<td>outstanding</td>
</tr>
<tr>
<td>A-</td>
<td>= 3.7</td>
<td></td>
</tr>
</tbody>
</table>
The grade point average (GPA) is computed by multiplying the point value of each grade earned by the number of semester hours of the course for which the grade is received and then dividing by the total number of hours of work attempted.

Example:

<table>
<thead>
<tr>
<th>Grades</th>
<th>Grade point value</th>
<th>Attempted hours</th>
<th>Grade point hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>C+</td>
<td>2.3</td>
<td>x 3</td>
<td>= 6.9</td>
</tr>
<tr>
<td>D</td>
<td>1.0</td>
<td>x 3</td>
<td>= 3.0</td>
</tr>
<tr>
<td>A</td>
<td>4.0</td>
<td>x 4</td>
<td>= 16.0</td>
</tr>
<tr>
<td>F</td>
<td>0.0</td>
<td>x 3</td>
<td>= 0.0</td>
</tr>
<tr>
<td>B-</td>
<td>2.7</td>
<td>x 3</td>
<td>= 8.1</td>
</tr>
</tbody>
</table>

Total 16 34.0

34.0 grade points ÷ 16 attempted hours = 2.125 GPA.

Reports of grades are issued at the end of the semester and are available online on myCommNet. Only those grades that are issued at the end of the semester are recorded on the student’s permanent record.

**Administrative Transcript Notations**

**AU** (Audit) No college credit earned.
I (Incomplete)  
See below.

M (Maintaining Progress)  
An administrative transcript notation used only for developmental courses to indicate that the student is maintaining progress but not at the usual rate. It may be given to a student for a course only twice.

N (N Grade)  
An administrative transcript notation for any situation where there is no grade reported at the end of the traditional semester (i.e., no grade received from a faculty member, course in progress, or no basis for a grade).

P (Pass)  
Used for successful completion of courses taken on a pass/fail basis. Students failing will receive a grade of “F”.

TR (Transfer)  
Used in place of grades for courses accepted for credit from other colleges and universities.

W (Withdrawal)  
See description above.

Repeating a Course

No student can take a course more than three times. The highest grade received will be used in calculating the student’s GPA. This does not apply to those courses that are designed to be repeated for additional credit. A request for waiver of these standards shall be made to the Director of Student Retention Services. Call 860-512-3303 for more information.

College transcripts will record all attempts at classes and the grades earned in each attempt. Students should note that, while MCC will not use repeated grades in calculating GPA, colleges to which they are applying for transfer may use a different method to make such a calculation.

Developmental Classes

MCC offers developmental classes in English and math. These classes are not college level classes, but they serve to prepare students for college level English and math. There are multiple levels of these developmental classes and placement in a particular level is determined by performance on the Accuplacer assessment test. Successful completion of each class with a grade of "C" or better enables one to go on to the next level. When the last class in the sequence is completed with a grade of "C" or better, students may then enroll in the corresponding introductory college level course. Developmental classes can be identified by examining the course number and/or course description. The three number code for developmental classes has a zero as the first number and the catalog descriptions indicate that these courses earn zero credits. Because developmental courses are not college-level classes, students do not earn college credit in such courses. Developmental classes vary in time commitment from three to six hours per week. These hours will be included in determining full- or part-time status. Grades earned in
developmental classes will not contribute to a student's GPA, but will contribute to an assessment of whether a student is making satisfactory progress and in determining eligibility for financial aid. Students are charged for developmental classes and those students who are eligible for financial aid may apply their aid toward this cost.

**Incomplete Grades**

Granting of an Incomplete:

1. An Incomplete (I) is a temporary grade assigned by the faculty member when course work is missing and the student agrees to complete the requirements. Although a student may request an Incomplete, the faculty member is not required to honor the request. The faculty member should assign an Incomplete when there are extenuating circumstances, such as illness, that prevent a student from completing the assigned work on time and the student has completed most of the course requirements and, in the judgment of the faculty member, the student can complete the remaining work within the time limit established by system policy.

2. A faculty member who assigns an Incomplete shall file a report form that includes:
   a. a brief description of the requirements to be completed;
   b. the date by which the course work must be submitted to the faculty member, which is the end of the tenth week of the next standard semester;
   c. a statement that the Incomplete will change to a specified letter grade if the work is not completed by the end of the tenth week of the next standard semester.

The faculty member shall keep the original signed form, with copies to the student, the faculty member, the Registrar and the academic division director.

3. All Incompletes must convert to a letter grade by the end of the following semester. If a student submits the required work on time, the faculty member shall calculate a grade to replace the Incomplete and submit it to the Registrar by the end of the semester. If a student fails to complete or submit the required work by the specified time, or if the faculty member fails to submit a replacement grade, the Registrar shall convert the Incomplete to the letter grade specified in the report form, and that letter grade shall be entered on the student transcript.

4. Students with an Incomplete are temporarily ineligible for semester or graduation honors. Upon conversion of the Incomplete to a letter grade, students may retroactively receive semester or graduation honors, and such recognition shall appear on the transcript, provided that the student has earned the required grade point average.

5. Academic Standing will be recomputed upon completion of any course in which an incomplete "I" grade is received.

**Audit**

An audit status allows students not wishing credit to sit in on a course. In order to register as an “Audit” student, the prospective student must meet all college and course requirements, such as being a high school graduate and meeting all prerequisite requirements. This status allows students to participate in class activities without being required to meet the examination requirements of the course. Students may ask to have papers and other work critiqued, but
faculty members are not required to grade an auditor’s course work. A student may not register as an “audit” student until after registration has ended and students wishing to take the course for credit have enrolled by the last day of registration. A student may not repeat an audit in the same course. A student who wishes to change from credit to audit status must request this from the Registrar’s office within the first four weeks of the course. Students auditing a course may not change to credit status. Full tuition and fees are charged for courses audited. Financial aid does not cover audited classes.

Transcripts
Requests for official or unofficial transcripts can be obtained online in myCommNet by following these steps:
1. Login to myCommNet (http://my.commnet.edu)
2. Once you are in myCommNet, click on the Student tab.
3. Click into Student Self-Service, and choose Student Records.
4. Click Request Official Transcript.

No telephone requests will be accepted.

Student Responsibilities

Attendance Policy
The faculty of Manchester Community College believe that regular and prompt class attendance is necessary for a student to benefit from the learning experience. Specific attendance requirements will be set by each individual instructor.

Academic Integrity
Manchester Community College is committed to academic integrity. An academically honest student submits for evaluation only such work, including tests, papers, reports, presentations or ideas, that have been written, performed or created solely by that student. On those occasions when the stated rules of a course permit collaborative efforts, the contributions of other individuals and sources should be appropriately acknowledged. It is, at all times, the responsibility of the student to maintain conduct consistent with the concept and definition of academic integrity, including not only the avoidance of plagiarism, but also other actions further outlined under College Policies in the Student Handbook.

Plagiarism
Plagiarism is as the act of taking someone else’s idea, writing or work, and passing it off as one’s own. If you fail to give credit to the source of the material, whether directly quoted or put in your own words, this lack of credit constitutes plagiarism. Whether you take, buy or receive material from the Internet, from a book, from another student or from any other source, and you fail to give credit, you are stealing ideas; you are engaged in plagiarizing. Plagiarism is a serious violation of academic standards and has serious academic consequences for the student. At the discretion of the instructor, plagiarism may result in failure of the submitted work or failure for the course and as an act of academic dishonesty, may result in additional disciplinary action by the college, as indicated in the Student Handbook, College Policies, under the heading “Student Discipline,” 5.2.1 Policy of Student Conduct, Section 3 (2) – Academic Integrity and Section 4 – Sanctions.

Copyright and Fair Use Policy
Manchester Community College encourages its faculty, staff and students to use multimedia and text resources to enhance teaching and learning while abiding by copyright and intellectual property law, including the U.S. Copyright Act, the Digital Millennium Copyright Act and the TEACH Act.

**Students Rights**

**Review of Academic Decisions**

Students are evaluated and awarded credit based upon academic performance and without regard to personality, race, gender, religion, personal beliefs or on the basis of a previous complaint/grievance.

A student may request review of a grade or other decisions affecting academic status in accordance with the college's policies. (Complete texts of these policies are available in the office of the Dean of Student Affairs.) The informal procedure that follows is suggested as the way a student would begin:

A student who has an academic grievance may discuss it first with the instructor or staff person involved, with a counselor or with an administrator (for example: division director, dean). If this discussion does not resolve the matter, the student should discuss the complaint with the supervisor of the person towards whom it is directed.

Within 15 calendar days of the student’s awareness of the academic decision, if a satisfactory resolution still has not been achieved, the student should proceed in accordance with the grievance procedure in the *Student Handbook* titled “Student Rights,” Section 3: Review of Academic Standing. (A copy of the official text of “Review of Academic Standing” can be obtained from the office of the Dean of Student Affairs.)

**Release of Directory Information**

The Board of Regents has designated the following as directory information: student names and addresses, dates of attendance, full vs. part-time student status, awards, major/program of study, honors and graduation date. For purposes of access by military recruiters only, telephone listings and, if known, age, level of education and major are also designated as directory information.

The college may disclose directory information without prior consent, unless a student has exercised the right to refuse to permit the college to release directory information in accordance with paragraph 4 of the *Board of Trustees Policy Manual*.

The Family Education Rights and Privacy Act (FERPA) affords students the right to refuse to permit the college to release directory information about the student, except to school officials with a legitimate educational interest and others as indicated in Section 5.7 Paragraph 4 of the *Board of Trustees Policy Manual*. To do so, a student exercising this right must notify the Registrar’s office in writing. The Registrar’s office is located in room L157 in the Lowe Student Services Center. Once filed, this notification becomes a permanent part of the student’s record until the student instructs the college, in writing, to remove it.

A copy of the *Board of Trustees Policy Manual* is available in the Office of the Dean of Student Affairs and online at www.commnet.edu.

**Name Change**

A student who has a legal name change must bring into the Register’s office legal court documentation, marriage certificate or divorce decree.

**Board Sexual Harassment Policy**
Sexual harassment is a form of sex discrimination that is illegal under state and federal law and is also prohibited by the Board of Regents policies. This policy is available in the following offices: Human Resources, Student Affairs, Academic Affairs and Library.

Transfer Policies

Transfer into a Connecticut Community College:
At all community colleges, degree and certificate credit shall be granted only for credit courses completed at all institutions within the Connecticut state system of higher education and at all other collegiate institutions accredited by an agency recognized by the Council for Higher Education Accreditation as either a Regional Accrediting Organization or a Specialized and Professional Accrediting Organization in accordance with the following:

1. Degree and certificate credit shall be granted for all credit courses that are applicable to the objectives of, or equivalent to the course requirements of, the curriculum in which the transferring student enrolls. Credit work that is not applicable or equivalent to curriculum requirements shall be accepted for credit at the discretion of the college. Degree and certificate credit shall also be granted on the basis of performance on examinations in accordance with standards and limits approved by the board of trustees.

2. Degree and certificate credit shall be granted for credit courses completed with a letter grade of “C-minus” or better, or with a grade of “P” (Pass). Such credit courses shall be accepted only for credit, and letter grades assigned by other institutions shall not be recorded or included in computations of student grade point averages.

3. Notwithstanding the number of degree or certificate credits which shall be granted in accordance with the foregoing, the student must complete at least 25% of the minimum credit requirements for the degree or certificate through course work at the college awarding the degree or certificate.

4. When a student seeks transfer credit for technical or specialty courses into a program that is also accredited by a national or regional specialized accrediting agency, such credits must be from a comparably accredited program. In the case of a request for transfer credit for technical or specialty courses from a non-specially accredited program, the college shall provide appropriate means for the validation of the student’s competency in the technical specialty course areas.

Transfer from a Connecticut Community College: It is the policy of the Board of Regents that graduates of the regional community colleges in Connecticut shall be accepted for admission to the state universities, provided they have received either the associate in arts degree or the associate in science degree in transfer programs, and further provided they are recommended for admission by the President of the regional community college granting the degree. Community college graduates who meet these conditions will be given credit for two years of college work and will be treated exactly like students who have completed the sophomore year at a state university and are advanced to junior standing.

Connecticut State University (CSU) Transfer Compact: Transfer compacts have been established between the Connecticut Community College system and the Connecticut State University system. The following guidelines outline conditions that must be met by students in order to participate in the program:
• Prior to completing fifteen college-level credits, students enrolled at any of the community colleges in a designated transfer program are eligible to participate in a guaranteed admissions program with a CSU system institution by completing a dual admissions form. They will be encouraged to enroll as soon as possible in their studies.
• Completion of the associate degree with a 2.0 GPA will guarantee admission to a Connecticut State University System institution.
• An associate degree holder will transfer a minimum of sixty (60) credits to the Connecticut State University, and the student will be awarded junior-level standing.
• During the dual enrollment period, community college students will be treated as continuing students in the Connecticut State University System institution for which they have been jointly admitted. These students will have access to faculty/staff advisement, library privileges and adhere to the requirements of the university catalog in effect when they first enroll in classes at the community college. Upon completion of the associate degree, registration options in the CSU institution will be granted junior level standing. The appropriate university will communicate with them on a regular basis.
• To continue the conditions of the guaranteed admissions provision, students must earn an associate degree within five years of their enrollment in the program and enroll at the Connecticut State University institution within two years of the completion of the associate degree.
• Community college students not choosing to sign a Guaranteed Admissions Agreement will still be eligible for transfer to a Connecticut State University. If transfer occurs prior to completion of the associate degree, transcripts will be evaluated by the university personnel on a course-by-course basis in accordance with existing transfer credit guidelines.

Transfer Agreements with the University of Connecticut
MCC partners with the University of Connecticut on several transfer programs. Students interested in transferring to UConn should meet with a faculty advisor or transfer counselor early in their MCC career for questions on eligibility and program advice.

Business & Technology Pathway: If you are earning an associate degree in business at MCC, you may be eligible to enter the UConn School of Business to pursue a bachelor of science degree in Business and Technology, available at UConn branch campuses in Stamford, greater Hartford, Torrington and Waterbury. To qualify for admission to the Business and Technology program as part of the Transfer Pathway, you must: complete your associate degree in the appropriate business program; earn a minimum cumulative grade point average of 3.0, achieve a 3.0 or higher in courses being used to meet junior/senior-level major requirements, and complete and submit an application for transfer admission directly to the University of Connecticut.

Bachelor of General Studies, Bachelor of Professional Studies: MCC students who successfully complete an associate degree with a GPA of at least 2.0 are offered automatic admission into the UConn College of Continuing Studies. The course credits earned for the associate degree will be transferred toward the 120 credits needed to earn a BGS degree from UConn; Bachelor of Professional Studies program students have a choice of degrees in occupational safety and health, organizational studies or web technology.
Accounting and Business Administration Transfer Program: Students are required to earn a minimum 3.3 cumulative average and be awarded an associate degree in the Accounting and Business Transfer Program at MCC to participate under the terms of this agreement. In addition, students must meet program prerequisites with a minimum grade of “B”; and must have met UConn’s second language requirement. Former University of Connecticut degree-seeking students are not eligible for this program.

Guaranteed Admission Program (GAP): The Guaranteed Admission Program is a transfer agreement between MCC and the University of Connecticut that guarantees admission to the University provided certain requirements are met. Incoming MCC students or students with up to 15 transferable credits at MCC may enroll in this transfer program. A 3.0 minimum cumulative grade point average, (3.3 for the School of Business) and an associate degree in Liberal Arts is required in order to qualify under the terms of this agreement. Upon completion of an associate degree, students may then go on to UConn and major in one of more than 50 majors offered in the College of Liberal Arts and Sciences, College of Agriculture and Natural Resources or School of Business. To complete the application process, contact the Admissions office. Former UConn degree-seeking students are not eligible to participate in the Guaranteed Admission Program. Note: It is recommended that students interested in transferring to the School of Business follow the Accounting and Business Administration Transfer Program, which is directly articulated for transfer to the University of Connecticut (see above).

College of Technology, Pathway Transfer Programs: Associate in science degree programs in Engineering Science, Manufacturing Engineering Technology and Technology Studies provide the pathways within the Connecticut College of Technology transfer programs into the University of Connecticut and the Connecticut State University System Schools of Engineering and Engineering Technology. Students may enter university engineering and technology programs through the MCC associate in science degree programs in engineering and technology and, upon successful completion of the programs, continue on at the University of Connecticut or the Connecticut State University System as third-year students with a full two years of credit towards a baccalaureate degree in engineering, engineering technology or industrial technology. MCC also provides the opportunity for students who complete the engineering and technology programs to transfer full credit to baccalaureate degree programs at other colleges and universities with which the college has transfer agreements.

Credit for Prior Learning
Students may earn college credit for knowledge they have acquired previously, for instance through independent study, prior course work at a non-collegiate institution, on-the-job training, professional development, military experience, cultural pursuits, or internships. There are five ways to obtain credit for prior learning:

1. AP Advanced Placement (College Board) Examinations http://apcentral.collegeboard.com/apc/Controller.jsp
2. College-level Examination program (CLEP) http://clep.collegeboard.org/
4. Portfolio Development at Charter Oak College http://www.charteroak.edu/current/programs/portfolio/
5. Credit for prior learning may be awarded by certain departments or programs at MCC, which have received approval by the Dean of Academic Affairs to do so. Please contact your program coordinator or division director for further information.

It is important to note the following:

- The credit listed as “credit by exam” on the transcript is treated as a form of transfer credit and it cannot be used to satisfy the college’s 25% residency requirement for graduation.
- Credit by exam or portfolio development may or may not transfer to another college or university. Students should check with the college or university to which they hope to transfer if they have questions about transferability.
- Students are responsible for all fees charged by testing and educational centers.

**College Level Examination Program**

CLEP enables those who have reached a college level of education outside the classroom to demonstrate their achievement and to use the test results for college credit or placement. The CLEP program offers two types of examinations:

- General examinations in English composition, humanities, mathematics, natural sciences and social science/history assess the student’s knowledge of fundamental facts and concepts, ability to perceive relationships, and understanding of basic principles.
- Subject examinations measure achievement in undergraduate courses. These tests measure the understanding of fundamental facts and concepts that would normally be covered in a college-level course in a specific subject area.

The CLEP tests are administered at various locations, such as Charter Oak College and Three Rivers Community College:

- Charter Oak College,
  CT  http://www.charteroak.edu/current/academics/earningcredits/exam/  Master list of tests:  http://www.charteroak.edu/Current/Academics/EarningCredits/Exam/exams-master-list.pdf
- Three Rivers Community College,
  CT  http://www.trcc.commnet.edu/Div_StudentServices/admissions/PlacementTesting.shtml

For more information on additional CLEP testing centers in CT visit http://www.cleptestreview.com/clep-test-centers/connecticut

For additional information on CLEP visit: http://clep.collegeboard.org/

**Defense Activity for Non-Traditional Education Support (DANTES)**

DANTES (now called DSST) sponsors a wide range of examination programs to assist service members in meeting their educational goals. They include:

- Credit-By-Exam - CLEP, DSST (DANTES Subject Standardized Tests), ECE (Excelsior College Exams)
- Entrance Tests - ACT, GMAT, GRE, LSAT, SAT
- Other - GED, Praxis

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These examinations are administered at 500 military installations by the DANTES Test Control Officer (TCO), who is normally the Education Services Officer or Navy College Education Specialist for the military installation, or by base-sponsored National Test Centers. About 150,000 DANTES-sponsored examinations are administered each year to military personnel. For more information visit http://www.dantes.doded.mil/DANTES_Homepage.html

**Portfolio Development at Charter Oak College**

Students who wish to apply for credit through portfolio development may enroll in Charter Oak College's 3-credit Lifelong Learning Credit Portfolio course, IDS102. Charter Oak only offers this option for courses for which no acceptable examinations of prior learning are available (such as through CLEP.) In this course, the student develops a portfolio in which he or she describes the learning acquired through prior experiences, specifies learning outcomes, provides appropriate documentation, and requests college credit for that learning. Information and FAQs regarding this program can be found at http://www.charteroak.edu/current/programs/portfolio/. Students are responsible for all fees charged by Charter Oak College.

**Academic Information**

**Associate Degree Programs**

MCC offers associate in art and associate in science degrees in over 40 disciplines. Associate degree programs prepare the student for work or for transfer, with advanced standing, to colleges or universities where studies will be continued toward a bachelor’s degree. MCC is accredited by the New England Association of Schools and Colleges and credits earned in MCC courses can be transferred to colleges and universities all over the country.

**Certificate Programs**

Certificate programs are specialized curricula designed to equip students with the skills and educational background needed to get a job after graduation. Although certificate programs include course work that can be transferred, those programs are not intended specifically for the purpose of transfer. Each certificate career program represents a briefer, concentrated period of study in a specific discipline. A student who successfully completes the program receives a certificate of completion for the work.

**Part-Time Studies**

Almost all programs can be pursued part-time. The college has no minimum requirement for the number of courses for which a student must register. Courses are scheduled from 8:00 a.m. to 10 p.m. each weekday, weekends and online in order to provide students with a wide range of scheduling options. Many students complete the degree requirements in three or four years.

**Double-Degree Program**

An alternative to the customary single-degree program is the double-degree program that allows a student to combine two degrees at graduation. Application for the second degree is normally made after a student has completed 30 credits in the first program of study. A minimum of 15 additional credits is necessary for the second degree. Students wishing more information should speak with a counselor.

**Academic Community Engagement**

860-512-2761
MCC’s Academic Community Engagement (ACE) program includes courses that enhance students’ academic and civic learning through meaningful and relevant service to the community. Offered in some classes as an optional or a required component, academic community engagement gives students the opportunity to experience the real-world application and implications of course material. Class assignments and activities challenge students to reflect upon their experiences, further enabling them to uncover and explore connections between their service work and course work.

For additional information, including a list of classes with academic community engagement components, please visit the ACE Program’s website or contact Dr. Tim Woods, ACE Program Coordinator, twoods@mcc.commnet.edu or 860-512-2761.

**Computer Facilities**

Manchester Community College offers comprehensive computing resources. College classrooms are equipped with state-of-the-art instructor stations. In addition to the traditional computer labs, there are also specialized computing facilities in disciplines such as language, science and advanced technology. Student access is available in the Library and in open computer labs. Both Windows and Macintosh computers are available at MCC. College computers are connected to the campus local area network, as well as the Connecticut Community College System wide-area network, which provides access to the Internet. Students can also access the Internet through wireless connections in the college’s many public areas such as the Library, building lobbies, and the SBM Charitable Foundation Auditorium. Community members can also connect to the Internet with personal devices through a wireless partnership with the Town of Manchester.

**Cooperative Education and Work Experience Opportunities**

**860-512-3312**

At Manchester Community College, students have the opportunity to earn credit, pay and work experience through the Cooperative Education program. Academic credit is awarded for cooperative education and work experiences under the supervision of selected faculty. Cooperative education and work experience opportunities allow students to bridge the gap between classroom theory and on-the-job training in an actual work environment. Cooperative Education is available to students in the following programs of study:

- Accounting Career; Administrative Assistant (all options); Business Administration; Communication; Computer Network Technology; Computer Programming Technology; Criminal Justice; Disabilities Specialist; Engineering; Foodservice Management; General Studies; Graphic Design; Health and Exercise Science; Hotel-Tourism Management; Journalism; Management Information Systems; Marketing; Paralegal; Social Service; Speech-Language Pathology Assistant; and Therapeutic Recreation.

In some programs of study, Cooperative Education/Work Experience is a required course within the curriculum.

**Enrollment Requirements:** Students must have a grade point average of 2.0 or better, have completed 12-15 credit hours towards a program of study, and receive permission from the program coordinator and Cooperative Education director. Prior to registering for the course, students must complete a “Statement of Understanding” form available at the Cooperative Education office or on the web at http://www.manchestercc.edu/students/form.php. During the
semester, students are required to attend a weekly, one-hour seminar in which work-related issues are addressed. The course is also offered online.

**Placement:** For paid placements, students must complete a minimum of 300 hours of employment during one semester. Positions that provide monetary compensation are paid for by the Cooperative Education employer. There is no guarantee from the Cooperative Education office that each student will receive a placement. Unpaid internships are for 150 hours during a semester.

The Cooperative Education office is located in the Lowe Student Services Center, room L120. For more information contact the Cooperative Education office at 860-512-3312.

**English as a Second Language**

**860-512-2678**

Manchester Community College offers the non-English speaker a variety of courses and levels of English classes to improve language proficiency in listening, speaking, reading and writing. For more information on ESL classes, call Diana Hossain, professor of ESL and Spanish, at 860-512-2678.

**Honors Program**

**860-512-2669**

The Honors Program helps students demonstrate high levels of motivation and performance to prospective employers or transfer institutions. Students have a chance to investigate topics of interest, conduct research, work on special projects, and actively share in the learning process with other classmates and their teacher. Recognition of honors work will be designated on transcripts.

To earn Honors credit, students enroll for and meet all the requirements for a regular section of a class, but then meet with the instructor and develop an additional project that they complete for honors credit. Students have two weeks from the start of a class to select the honors option.

**Library**

**860-512-2880**

The library is located in the Learning Resource Center. It holds over 50,000 volumes, has a strong reference collection, subscribes to over 450 periodicals, and has online access to a wide range of databases. An online catalog provides easy access to all library materials. The collection is directed toward supporting college programs of study and providing students with information and enrichment outside of course work.

The library offers numerous amenities including five group study rooms, individual study carrels, computers, WI-FI, laser printing (b&w and color), scanning, and photocopying. A magnification device for printed material is also available. In addition to traditional materials like books and CDs, students may borrow equipment such as laptops, Kindles, and flipcams at the circulation desk. The Fireside Commons is a large, contemplative space that is a designated quiet study area and features a working fireplace. The Library Garden is also available during warmer months for members of the MCC community to enjoy.

Students can seek help with research for papers or projects from one of our reference librarians. The librarians are available to assist students in formulating research strategies, searching the library's online catalog and research formulating, and using library services. The "Ask-a-Librarian" reference service allows students to connect to a librarian 24/7 wherever they are.
Students can request books and articles not available at MCC through our interlibrary loan service. Any state resident of high school age or older is welcome to register as a borrower at MCC's library.

**Technology Help Desk**

860-512-3456

The Technology Help Desk, located in Suite 204 of the Student Services Center facilitates a wide range of technology related services for the entire college community. Services for classrooms, conference rooms and public spaces include computer and audio-visual support, support for wireless network access, user account assistance and password reset services. The Help Desk also provides support for file storage, printing, email, and other technology services including telecommunications and end-user training and documentation. The Technology Help Desk uses an incident handling process that provides the framework for an orderly response to events that threaten or compromise the security, integrity or operation of computing resources at Manchester Community College.

**Graduation Requirements**

Graduation is not automatic.

The Board of Regents, through Manchester Community College, is authorized by the Connecticut General Assembly to confer associate in art and associate in science degrees, and award certificates, to candidates who have met all requirements.

It is the student’s responsibility to follow through EARLY and to meet all requirements listed below. If you have any questions, meet with your program coordinator or a counselor.

- Follow the catalog in effect when you declared your major. If you change your major you will be required to follow the catalog for the year in which you have made the change.
- Students that have returned to the college after a two or more years of separation must follow the program requirements at the time of re-admission to the college.
- Notify the Registrar if you are completing requirements at another college.
- Submit official transcripts from other colleges to the Admissions office for transfer of credit. This must be completed by the application deadline to insure participation.
- Matriculate (enroll in credit-bearing courses applicable to the requirements of a degree or certificate program).
- Satisfactorily complete the total credits required in the degree or certificate program.
- Complete course requirements with a minimum GPA of 2.0 or better. (The college reserves the right not to recommend transfer students with a GPA lower than 2.5.)
- Satisfy all financial obligations (library, parking fines, etc.).
- Complete residency requirement for 25% of course work.
- File grades for all incompletes and approved course variances with the Registrar’s office.

**Application for Graduation (Degrees and Certificates):**

Each student who expects to graduate must submit an application for the degree or certificate earned, even if they do not plan on participating in commencement. The graduation application is available on the college website, or in the Registrar’s, Counseling, Career Services, Assistant to the Dean of Academic Affairs, and Assistant to the Dean of Student Affairs offices. Students
who will complete all academic work by December 2013 must complete a graduation application for a degree and/or certificate by October 15, 2013. Students who will complete academic work by May 2014 must complete the application by March 15, 2014. Students who complete academic work by August 2014 must complete the application by July 1, 2014. Each student’s application will be reviewed and the student’s program of study will be checked and verified by the degree auditor. If a student did not meet their graduation requirements, their application will be carried over one semester. There will be only one Commencement ceremony, in the spring of each year. Regardless of graduation completion dates, all graduates are invited to attend Commencement.

Students who wish to earn a second degree from Manchester Community College will be required to complete a minimum of 15 credits beyond the number required for the initial degree, and fulfill all requirements of the second degree. A separate graduation application must be submitted for each additional degree. The Registrar’s office will notify students in writing of the results of the evaluation/audit. If a student is requesting more than a second degree or certificate, permission from the Dean of Academic Affairs is required. Students who have applied by the deadline and are short four or fewer credits to graduate may request special permission to participate in the ceremony. However, the student’s name may not be printed in the program and their certificate/degree will not be ordered until the next cycle after all requirements have been met.
# Institutional Learning Goals

Beginning in school, and continuing at successively higher levels across their college studies, students should prepare for twenty-first-century challenges by gaining proficiency in the following areas:

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<tr>
<th>Learning Goal</th>
<th>Achieved Through</th>
<th>How Practiced</th>
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| **Knowledge of Human Cultures and the Physical World** | • Study in the sciences and mathematics, the social sciences, the humanities, the histories, the languages and the arts  
• Participation in co-curricular programs and activities | By engagement with big questions, both contemporary and enduring                           |
| **Intellectual and Practical Skills**               | • Knowledge acquisition and application  
• Inquiry and analysis  
• Critical and creative thinking  
• Written communication  
• Quantitative literacy  
• Information literacy | Across the curriculum and co-curriculum, in the context of progressively more challenging problems, projects and standards for performance |
| **Personal and Social Responsibility**              | • Civic engagement  
• Intercultural knowledge and competence  
• Ethical reasoning and action  
• Humanitarianism | Through active involvement with diverse communities and real-world challenges               |
| **Understanding of Self**                           | • Intrapersonal development  
• Interpersonal competence | Through perseverance toward the accomplishment of educational and personal goals               |
| **Integrative Learning**                            | • Synthesis and advanced accomplishment  
• Across general and specialized studies  
• Within co-curricular activities | Through the application of knowledge, skills, and responsibilities to new settings and complex problems |

*Adapted from the Association of American Colleges and Universities' Liberal Education and America's Promise (LEAP) Essential Learning Outcomes*
Student Services and Activities

Student Affairs
The mission of the Division of Student Affairs is to contribute to the intellectual, personal, professional, cultural and social development of students. This is accomplished, in partnership with all divisions of the college, by providing co-curricular programs, experiences and essential support services that fulfill the mission of the institution. For more information, call 860-512-3203.

Academic Advising & Counseling
860-512-3320
The Advising and Counseling Center professional counseling staff offer comprehensive academic advising services for all new, returning and transfer-in students. Students have the opportunity to discuss their short and long-term goals, results of their assessment test (Accuplacer), planned programs of study and degree/certificate program requirements. Students who have declared their majors in a program specific program are expected to link with their academic program coordinators and/or faculty early on to provide appropriate academic mentorship. All new students who are pursuing a General Studies, Liberal Arts & Sciences degree, or who have not declared a major, need to meet with an assigned advisor in the Advising and Counseling Center. Students may schedule appointments by contacting the Advising and Counseling Center at (860) 512-3320, or by contacting the appropriate faculty advisor.

During Academic Advising Weeks, returning students are encouraged to meet with a faculty advisor from their selected program of study. Academic Advising Weeks are scheduled each semester prior to the start of course registration. A list of program coordinators is available in the Advising and Counseling Center, SSC L108 and online at www.mcc.commnet.edu/students/advising.

New students are expected to register online for the New Student Group Advising Seminar at www.mcc.commnet.edu/ui/nss. The New Student Group Advising Seminar is an informational advising seminar where new students are provided with an overview of the college, its support services, college catalog, explanation of English and math assessment results, as well as an online demonstration on how to read the course schedule; how to create a balanced course schedule; how to navigate their myCommNet accounts; and how to pay and register online.

Personal Counseling
The Advising and Counseling Center professional counseling staff provides a conducive, private environment in which students may discuss personal and/or social concerns. Counselors are available for short-term counseling in dealing with issues such as stress, anxiety and academic difficulty. Counselors recognize that many students are attempting to balance work, school and family responsibilities as well as personal needs. Counselors also provide help with decision-making, problem-solving and personal adjustment concerns. Students who need more extensive counseling assistance will be referred to appropriate community agencies. All counselor/student contacts are private and confidential.

Academic Support Center
860-512-2610
The Academic Support Center (ASC), located in the Lowe Student Services Center, Room L282, offers many opportunities for academic support to students of all ability levels. Individual or small group tutoring, subject-related review sessions, ESL and foreign language conversation
labs, and college survival skills workshops are some of the services offered to students to enhance their understanding of classroom material. ASC staff is available to collaborate with instructors on specific activities to complement or supplement classroom instruction. The Academic Support Center offers walk-in support for writing and mathematics in addition to individual tutoring appointments.

**Computer-Assisted Lab:** Basic training in Windows, Microsoft Word, Excel, PowerPoint, Access and the Internet is available by individual appointment. Computers may be used on a walk-in basis.

**eTutoring:** Students may register for free online tutoring assistance in writing (all subject areas), mathematics, accounting, statistics, biology, chemistry, general science, and anatomy and physiology. Students can submit writing assignments for feedback, receive live one-on-one mathematics help (subject to tutoring schedules), and leave questions for tutors. eTutoring is coordinated by the Connecticut Distance Learning Consortium, and tutors are based in participating academic institutions, including MCC. Visit the website at www.etutoring.org.

**Individual Tutorial Assistance:** Students may make day, evening, and Saturday appointments for coursework tutoring in the ASC. Subjects for one-to-one tutoring include English, math, science, social science, business, accounting and others. Tutors include faculty, professional staff, and trained peers.

**Writing Center:** The Writing Center is equipped with computers and assorted reference materials. The work area is a place for everyone; students, faculty and staff are welcome to write and/or talk about their writing and to meet in writers’ groups. The Writing Center does not offer extensive one-to-one tutoring, but students may be referred to an individual English tutor appointment for more comprehensive one-to-one assistance. Writing Center staff members will offer feedback about writing, answer specific questions, and direct writers to appropriate resources, including other writers.

Information about all of the services offered by the Academic Support Center is available at: www.manchestercc.edu/academic/asc.

**Accident Insurance**

860-512-3568
Enrolled students are carried automatically by group accident insurance while they are attending classes, or participating in—and while traveling directly to or from—an activity sponsored by the college. Students may purchase a 24-hour accident and sickness insurance through this policy. Insurance information is available in the Health and Wellness Resource Center, Great Path Academy, GP109 or in the Office of Student Life, L154, Lowe Student Services Center.

**MCC Alumni Affairs**

860-512-2909
Manchester Community College Alumni Affairs is committed to building an effective network of alumni that is representative of the college community while meeting the changing needs of diverse alumni. MCC Alumni Affairs continues to focus their efforts on engaging students through networking events and communications such as the eNewsletter. Any student who takes classes at Manchester Community College is considered an alumnus and is welcomed into the alumni family. For more information on MCC alumni visit www.manchestercc.edu/alumni.

**Art**

860-512-2693
Visual art, by professional artists and MCC students, is on display throughout the campus and at MCC on Main. The Hans Weiss Newspace Gallery, located in the SBM Charitable Foundation
Building, hosts monthly exhibitions of work by local and international artists, both acclaimed and emerging. Additionally, student art and pieces from outside artists are continually on display throughout the campus.

**Fitness & Recreation**

860-512-3353

Current students with a valid RECpass have unlimited access to the weight/cardio room, group exercise classes and intramural and recreation programs. Students may purchase a RECpass for $25/semester at the Office of Student Life, L155. RECpass activities include cardio/weight room, group exercise classes, intramurals and special events.

The Weight/Cardio Room is open Monday, Wednesday and Friday from 11:00 a.m. to 6:00 p.m. and Thursday & Friday from 9:30 a.m. to 6:00 p.m. It is a self-guided use facility available to students, employees and members of the community. It is equipped with free weights, cable machines, a multi-station universal, functional strength equipment and cardio machines. A daily schedule of group exercise classes features: boot camp, core conditioning, functional strength, Kripalu® yoga, and Zumba ®Fitness. Intramural programs include basketball, indoor soccer, volleyball and flag football and are offered seasonally Monday through Thursday from 2:15 p.m. to 4:15 p.m. Full locker rooms are located adjacent to the facilities. The weight/cardio room and fitness studio are accessible. If you need an accommodation please see the Assistant Director of Fitness & Recreation, L154m. The Department of Fitness and Recreation is committed to engaging all students in their pursuit to be fit and active and to live long, healthy and happy lives.

Welcome!

**Career Services**

860-512-3374

The Career Services office provides comprehensive programs, activities and services that assist students, alumni and community members to prepare for finding suitable employment by developing resume writing and interviewing skills, job-search strategies, and a deeper understanding of the fit between their competencies and the world of work. The office runs regularly scheduled job search skills workshops, organizes job and volunteer fairs, and coordinates alumni career panels, on-campus recruitment opportunities and various career-focused special events throughout the year.

In addition to developing and fostering positive relationships with recruiters both locally and nationally, Career Services offers an online job listing service that enables job seekers to post resumes and search full-time, part-time and volunteer positions as well as internships. Job seekers can also take advantage of an online career information delivery and exploration resource called Focus 2, which is designed to help users develop self-knowledge related to career choice and work performance by identifying, assessing and understanding their competencies, interests, values and personal characteristics.

Career Services recognizes the need for career development over the life span, and thus promotes a greater awareness within the institution regarding the importance of developing professional interests and competencies and exploring future career possibilities. To learn more about upcoming events and resources, make an appointment with a Career Services staff, or register for the online job listing service, please go to: www.manchestercc.edu/ career. Job seekers are also encouraged to visit the Career Services office in the Lowe Student Services Center; L-120.
Child Development Center

860-512-3272

The Child Development Center has been in operation since 1973. It is open 9 a.m. to 4 p.m., Monday through Thursday, and 9 a.m. to 12 noon on Friday, throughout the fall and spring semesters and operates on the same schedule as the college. The experienced, professional staff provides a nationally accredited preschool program in a warm, safe and supportive atmosphere. Students in MCC’s Early Childhood Education program serve their internships in the Center with the guidance and support of the staff.

The preschool program is designed to stimulate and challenge the curious, creative preschooler. The environment is carefully prepared with a wide variety of activities, both group and individual. These include art, music, language, cooking, natural science, creative movement, outdoor play and the development of specific learning skills.

Children aged two years and nine months in September through five years of age are eligible to attend, with priority given to children of MCC students. Kindergarten-eligible children may not attend. Community residents may register children when space is available. Children may be registered for two, three, four or five half or full days to accommodate parents’ school or work schedules. Space is limited; parents should enroll their children as early as possible in the office of the director, room L140, Lowe Student Services Center. Registration for spring begins in December; for the fall, in May and August. A $25 application fee is required. A limited amount of financial assistance is available to eligible MCC students.

Counseling Center

860-512-3320

The Counseling Center provides a private environment in which students may discuss personal and/ or social concerns. Counselors are available for short-term counseling in dealing with issues such as stress, anxiety and academic difficulty. The counselors recognize that many students are trying to balance work, school and family responsibilities as well as personal needs. The counselors provide help with decision-making, problem-solving and personal adjustment concerns. Students who need more extensive therapy will be referred to appropriate community agencies. All counselors/client contacts are private and confidential.

Cultural Events

Throughout the year, MCC sponsors a wide variety of cultural programs on campus and at MCC on Main. Musicians, authors, speakers, poets and actors appear on campus to present examples of the diversity and richness within our culture. Programs include Cultural Diversity Day, poetry readings and professional dance performances. For the most up-to-date event listings, visit the MCC website.

Health and Wellness Resource Center

860-512-3262

The Health and Wellness Resource Center is open to all members of the college community for treatment of minor illness, referrals, medical excuses, accident reports, student insurance and counseling about health-related matters. Hours during which the coordinator is on duty are posted outside the Health and Wellness Resource Center, Great Path Academy, room GP109.

Housing

Manchester Community College is a non-residential college. Students are responsible for their own housing arrangements.
Institute of Local History
860-512-2770
The Institute of Local History stimulates interest in, and spearheads projects related to, the history of the region the college serves, as well as more broadly-based projects on Connecticut history. It serves as a service and resource center for local historical studies. Among its on-going projects are an oral history project for the town of Manchester, annual walking tour of the Cheney Brothers’ National Historic Landmark District, several non-credit courses and workshops, and a lecture series. It has also cooperated in the publication of two books about the history of Manchester.

Institute on Disability and Community Inclusion
860-512-2789
Established in 1992, the MCC/Communitas Institute on Disability and Community Inclusion is a cooperative institute that works to eliminate negative attitudes toward children and adults with disabilities. The Institute conducts conferences, seminars and think tank sessions, and augments the book, journal, video and computer holdings of the MCC library. Visiting scholar programs, focused research projects, and visits by international leaders help to present new stories and research that will reduce fear and misunderstanding concerning the inclusion of children and adults with disabilities into everyday community life.

MCC Police
860-512-3680
The mission of the MCC Police department is to provide a safe and secure educational environment for the college’s diverse and dynamic population. This is accomplished by providing professional police service, active crime prevention and proactive patrol. The Jeanne Clery Disclosure of Campus Security Policy and Campus Crime Statistics Act of 1990 (34CFR668.46), also known as the “Clery Act”, is a federal law that requires colleges and universities to disclose information about crime on and around their campuses and to provide the institution’s policies concerning campus security. MCC’s Annual Security Report, prepared to meet the requirements of this act, can be accessed on the MCC website (www.manchestercc.edu/offices/police/ASR.php). A copy of this report is available, upon request, at the Campus Police department, room L174, Lowe Student Services Center.

Mentoring
860-512-3320
Brother-2-Brother and Sister-2-Sister are mentoring programs designed to provide additional support and encouragement to African American and Latino students, as they work towards their academic and professional goals. These mentoring programs are committed to the academic, cultural, personal and social development of African American and Latino students and:
  - Equip students with the necessary tools and resources to pursue, achieve and maintain academic excellence;
  - Encourage students to cultivate positive peer and adult relationships;
  - Help students engage in their life-long learning process;
  - Promote student leadership and service to the community.
For more information, please contact Ta’Shema Odoms or Robert Turner Jr. at 860-512-3320.
Music
860-512-2674
The MCC Vocal and Instrumental Ensemble gives music majors the opportunity to develop their ensemble skills and the general college community the opportunity to actively and passively engage in a music experience on the campus and in the community.

New Student Orientation
860-512-3283
When students participate in orientation programs, they increase their chances of academic success. Therefore, all new students, transfer students and students who are returning to college after a long absence are expected to attend New Student Orientation. Most first-year students find college life and class expectations complex, confusing and uncertain. Consequently, the program is designed to help ease transition into the College; to give basic information on how to be successful during the first-year; to familiarize students with their classes, campus facilities, resources and policies; and to equip students for the beginning of a very exciting, productive and positive experience. Entering students will have ample opportunity to meet and interact with other students from different backgrounds and cultures, as well as faculty/staff and administrators. Orientation programs are held at the beginning of each semester. Please check on-line to view information regarding New Student Orientation (www.manchestercc.edu/students/nso) or call the Office of Student Activities, 860-512-3283.

Services for Students with Disabilities
For students with learning disabilities and ADHD:
860-512-3597 – Gail Stanton
860-512-3595 – Joan Kantor

For students with physical and psychological disabilities:
860-512-3592 – Joseph Navarra
Support services at MCC are designed to “even the playing field” for people with disabilities. Towards this end, MCC provides academic adjustments such as proctors, readers and scribes; test adjustments; sign language interpreters; adaptive equipment; and assistance in locating and acquiring services from community agencies.
It is the responsibility of the student to disclose his/her disability and to provide appropriate documentation to a staff member in Disability Services. It is only after this disclosure and review of documentation that adjustments can be determined. Adjustments are not provided retroactively; students will be eligible for academic adjustments deemed appropriate by a staff member from the time of the disclosure and documentation review going forward. The Disability Services: Policies and Procedures Manual for Students, is available in the Advising and Counseling Center, SSC L108, and Testing and Disability Services, SSC L131.
Individual services are consistent with Section 504 of the Rehabilitation Act and the Americans with Disabilities Act.

Student Activities
860-512-3283
The Office of Student Activities (OSA) administers co-curricular programs, oversees the Student Activity Fund and offers a variety of involvement experiences, leadership training, and social and cultural programs and services to meet the needs of MCC students. OSA programs provide multiple opportunities for students’ personal growth and development outside the formal
academic environment. Students are encouraged to participate in the variety of activities and services that OSA provides in order to produce a more socially and culturally diverse learning environment. OSA is located in the Lowe Student Services Center, room L149.

**Campus Activities Board**

860-512-3283
The Campus Activites Board (CAB) is responsible for the coordination, planning and implementation of diverse programs at Manchester Community College. The committee, composed entirely of students, is funded by the Student Government Association through the activities fee. Any student may become a member of this committee, which sponsors films, concerts, speakers, Spring Fling, coffee hours, special events and travel programs each year. Through active involvement, students develop practical leadership and programming skills while providing a diverse co-curricular activities program in response to student needs. CAB works out of OSA in the Lowe Student Services Center, room L149.

**Student Clubs**

860-512-3283
Manchester Community College sponsors many clubs of an academic, social, political and professional nature (some are affiliated with their area and national counterparts): Administrative Professionals Club, Alpha Mu Gamma, Black Student Union, Chess Club, Computer Repair & Share, Drug and Alcohol Recovery Counselors (DARC), Green Club, Habitat Club, ICE Radio Station, Le Cercle Français, Manchester Political Union, Outdoor Club, Paralegal Association, Phi Theta Kappa (PTK), Programming Club, PRIDE Club, Science & Engineering Club, Games Club, Spanish Club, Upper Room Christian Fellowship Club, and Veterans Empowering Themselves to Succeed (VETS).

OSA encourages students to start new clubs based on their interest. For more information on when clubs meet, or how to start a new club, contact OSA.

**Student Government Association**

860-512-3292
The Student Government Association (SGA) is a governing body of elected and nonelected students who represent the entire student body. Funds collected via the student activity fee are used by the SGA to sponsor various clubs, organizations, activities, the student newspaper and student services. As the official voice of the student body, the SGA has the power to regulate the activity fund and member organizations, and to make decisions that affect all students. Any student may attend monthly meetings of the SGA. However, one needs a GPA of 2.5 and to have earned at least three credits at MCC to become an executive officer. The SGA office is located in the Lowe Student Services Center, room L154c.

**Student Newspaper**

860-512-3290
Students are encouraged to contribute to the student newspaper, the Live Wire. Published seven times each school year, the Live Wire is funded by the Student Government Association and advertising revenues. This student newspaper serves the faculty, staff and students and focuses on news and events surrounding MCC’s campus and the greater Manchester community. Volunteers who can write, edit, take photographs, create comics or help with page layout and design and welcomed. Members can gain journalism and leadership skills. Visit the Live Wire office, located in the Student Services Center, room L154j.
Transfer Services

Transfer Services 860-512-3328
MCC has the following resources available to students and community members who wish to transfer out to other institutions (including baccalaureate colleges and universities):

- Individualized transfer counseling
- Transfer articulation agreements
- General education articulation guides for local colleges
- Transfer resources, including: college catalogs, viewbooks and brochures
- Transfer fairs
- On-campus visits from regional colleges and universities
- Transfer workshops

For more information about MCC’s transfer program, please contact the Counseling Center, 860-512-3328.

Transitional Programs

Transitional Programs 860-512-3344
MCC’s Transitional Programs are designed to help students adjust to the demands of college. All of the programs provide workshops or courses that present the skills necessary for academic success. On-going support from peers and professional advisors is available.

Adults in Transition (AIT): Adults in Transition is a one-semester program created to help students cope with the stress and changes involved in returning to school after a long absence. AIT is open to students who plan to start their first semester at MCC (including students who are returning to MCC after a long absence). Students who enroll in MCC through AIT are provided with special services that include:

- an individualized interview to determine personal needs
- personalized academic advising and registration services
- a required one-credit study skills class that meets before the semester begins
- a required two-credit transition development course that introduces all aspects of the College and provides assistance in career and curriculum planning
- staff and peer support

Students are encouraged to take one or more courses in their degree or certificate program or field of interest along with the AIT courses. The AIT program is offered in the daytime and evening. Call 860-512-3344 for further information or to schedule an appointment for a personal interview.

Summer Training and Academic Retention Service (STARS): The Office of Transitional Programs also offers STARS, an intensive six-week summer bridge program for incoming students. Students must apply for the program during the spring and be a first-generation college student. There is no cost for the program and students earn four credits for successfully completing the program. For more information, call 860-512-3344.

Veterans O.A.S.I.S. Center

Veterans O.A.S.I.S. Center 860-512-3362
The Veterans O.A.S.I.S. (Operation Academic Support for Incoming Service Members) Center is located in the Lowe Student Services Center, L-101, and provides a dedicated, supportive space for veterans and active military service men and women to network, socialize, study and share as
they integrate into the college experience. For more information, please contact Ta'Shema Odoms at 860-512-3307.

**Women’s Resources**

860-512-3324

Women Resources offers information, workshops and programs on many topics including education, women’s health, sexual assault, battering, sexual harassment and stress management. For more information on Women’s Resources, please call 860-512-3324.

**Continuing Education**

The college’s Continuing Education Division provides programs relevant to changing community needs and promotes the college as a focus of lifelong learning. Each year more than 6,000 area residents enroll in credit and credit-free courses, seminars and workshops, as well as participate in the many cultural activities and special educational services offered through this division. The Continuing Education offices are located in the Learning Resource Center in the John V. Gannon Continuing Education Center.

**Business and Industry Services**

860-512-2813

As part of a collaborative effort of the state’s 12 community colleges, the division works closely with business and industry, as well as agencies and school districts, to provide both credit and credit-free, on-campus or on-site instructional programs for employers. Popular training areas include manufacturing and technology, computer skills and applications, presentation skills, basic skills, English as a second language, management and supervisory skills and Lean business enterprises.

The Director of Business and Industry Services works with area companies to seek funding for custom training. In addition, through the Office of Institutional Development, grant funds are sought to support special projects, expand services to specific groups in the communities, and to allow the development of new curricula to meet changing technologies.

**Credit Courses**

860-512-2800

*Special Sessions:* The Continuing Education Division administers Summer Session and Winter Intersession. The Summer Session includes three-week, six-week and eight-week day, evening, weekend and online courses that are offered from May through July. Winter Intersession courses meet for a three-week period immediately after Christmas.

*College by Design:* College by Design offers an accelerated schedule of eight and twelve-week credit classes, weekdays, weekends or online. Courses offered through College by Design are open to all students who meet prerequisite requirements.

**Credit-Free Certificate Programs**

860-512-2800

Credit-free certificate programs have been developed by faculty and area professionals to provide a strong foundation of practical and up-to-date information that can assist students in developing skills for their current jobs or for new careers. These programs are hands-on with a small student-teacher ratio and are taught by professionals in the field.

Current certificate programs include Certified Nurse-Aide, Emergency Medical Technician, Veterinary Assistant, A+, Network+, Microsoft Office, Oracle Database Administrator, Personal
Trainer, Pharmacy Technician, Phlebotomist, Precision Machining and Real Estate, for those seeking to develop marketable job skills in those fields.

Credit-Free Courses
860-512-2800
In addition to credit courses, the Continuing Education Division administers an extensive credit-free program. Each semester more than 300 credit-free courses are offered for career and personal development, cultural enrichment and contemporary living. Courses are offered days, evenings, weekends and online throughout each semester. A transcript can be issued upon written request.

Excursions in Learning
860-512-2800
Excursions in Learning is an enrichment program for children ages 5-14. Creative, high achieving students can explore the sciences, mathematics, history, culture, the arts, language arts and computer technology through hands-on, experiential learning. Special Saturday programs are offered in the spring semester. A one-week culinary camp, a one-week leadership academy and one-week engineering camps are offered in July, and a two-week summer program is offered in early August.

Off-Campus Sites
860-512-2800
Off-campus courses are offered at studios, parks, schools, museums and community sites in the region as well as MCC on Main, the arts and education center in downtown Manchester. The course offerings are designed to meet the specific needs of the employers and residents of the area. The Division continually seeks to establish new off-campus sites to respond to business and community needs.

Organization of Active Adults
860-512-2800
The Organization of Active Adults (MCCOAA) is composed of adults 50 years of age or older who share common interests in educational and cultural opportunities. Short courses designed specifically for this age group are offered through the Continuing Education Division, and special social and cultural events are scheduled throughout the school year. While some Association members are students of the college, it is not a requirement for membership.

Publications
860-512-2800
Brochures and catalogs are published periodically by the Continuing Education Division to provide schedules of educational offerings and registration information. These are available at the John V. Gannon Continuing Education Center (Learning Resource Center, room LRC B147) and on the MCC website.

Registration
860-512-3220
Registration for courses offered through the Continuing Education Division may be done online, in person, by fax or by mail. Registration by telephone is also available for credit-free courses at 860-512-3332. Credit-free courses are open to everyone, regardless of educational background, on a “first-come, first-served” basis. Courses may be taken individually or as part of a planned program of study.
Online Learning

MCC offers a variety of fully online, hybrid and computer-assisted courses that enable anytime, anywhere access to class materials and enhance engaged learning. This flexible learning approach is central to MCC’s responsiveness to students’ needs to balance family and work commitments while pursuing educational excellence.

Online learning is provided through Blackboard, an electronic environment that includes a grade book, discussion board and Web-based access to course materials. These materials may range from simple text files and Web links to PowerPoint presentations, audio files, videos and simulations.

MCC offers three types of distance learning courses, which are listed by the following “Instructional Types:”

- **ONLN**: Fully online courses. All of your course will take place online.
- **OLCR**: Online with on-campus requirements such as tests or orientations. Contact your instructor for details.
- **HYBR**: Hybrid courses. In a hybrid course, you will have scheduled on-campus class meetings and online coursework and interactions. The number of on-campus meetings may vary according to instructor.

The faculty at MCC is composed of experienced educators who are known for providing individual guidance. They provide an electronic environment that encourages student-to-student interaction. Whether it is through discussions, chat or group projects, MCC instructors provide a rich and rewarding experience.

Textbooks for online courses may be purchased from the campus bookstore, or you may order textbooks online at: [www.efollett.com](http://www.efollett.com).

Technical Requirements and Recommendations

If you enroll in an online or hybrid course or if your on-campus instructor requires you to access Blackboard for materials, grades or discussions, you will need the following to work from your home:

- **An Internet connection**, preferably via cable modem or DSL, that will provide the speed/bandwidth necessary to access your course and any multi-media material your instructor may require. A slow connection, such as a dial-up, will not provide satisfactory performance.
- **A Web browser**. You can check your browser’s compatibility with Blackboard at: [www.websupport.ct.edu](http://www.websupport.ct.edu) and select Browser Checker. Also use this link to make sure you have the correct version of Java.
- **A word processor**. Microsoft Word is used by many instructors.
- **Other software** recommended by your instructor. Commonly used software includes Excel, PowerPoint and other Microsoft Office applications. Your instructor also may require specialized software used in particular disciplines. Some MCC instructors may use various Web plug-ins such as Adobe Acrobat Reader, Apple QuickTime, Macromedia Flash Shockwave, RealPlayer and/or Microsoft Media Player. System and software requirements for a course may vary—please check with your instructor before beginning the course.
- **An active email account**.

How Online Learning Works

Although fully online and hybrid courses provide flexibility that allow you to access information and participate in course discussions anytime and anywhere that you have a computer and an Internet connection, these are not self-paced courses. Just as in any MCC course, you will have weekly deadlines for assignments, discussions and
assessments. The content and expectations in an online course are the same as in an on-campus course at MCC. However, most communication in an on-campus course involves talking and listening, as well as reading and writing. In an online course, communication occurs primarily through reading and writing. Before enrolling in an online course consider the ways that you learn and communicate most easily. Skills that will help you succeed in online learning include: good time management, familiarity with basic computing such as keyboarding, web browsing and word processing; and good reading, writing and communication skills. If you have never taken online classes, contact the Educational Technology & Distance Learning Department (ETDL) at sandbox@mcc.commnet.edu for a login to SmarterMeasure, a self-assessment that will help you decide if online learning is right for you. You also should review the information on the ETDL website for MCC students at http://www.manchestercc.edu/students/resources/distance.php. This site includes information about how to log into Blackboard, where to get help, technical requirements for your computer, and other resources.

In any online learning environment, you will be communicating directly with fellow students and the instructor through email and discussion forums. Class discussions will occur primarily through the discussion board. You will read what your instructor and other class members have posted, write responses to readings or questions, and participate in text-based class discussions about the course material. Discussion posts may be written at your convenience as long as you meet your instructor’s deadlines for each discussion assignment. On average, you can expect to spend the same number of hours working on your online course as you would on an on-campus course, including the hours you would normally spend in the classroom.

For information on:

- Blackboard technical or log-in questions, call 860-512-2857 or send an email message to: sandbox@mcc.commnet.edu.
- A particular course, contact the individual instructor.
- Federal financial aid, contact the Financial Aid office at 860-512-3380.