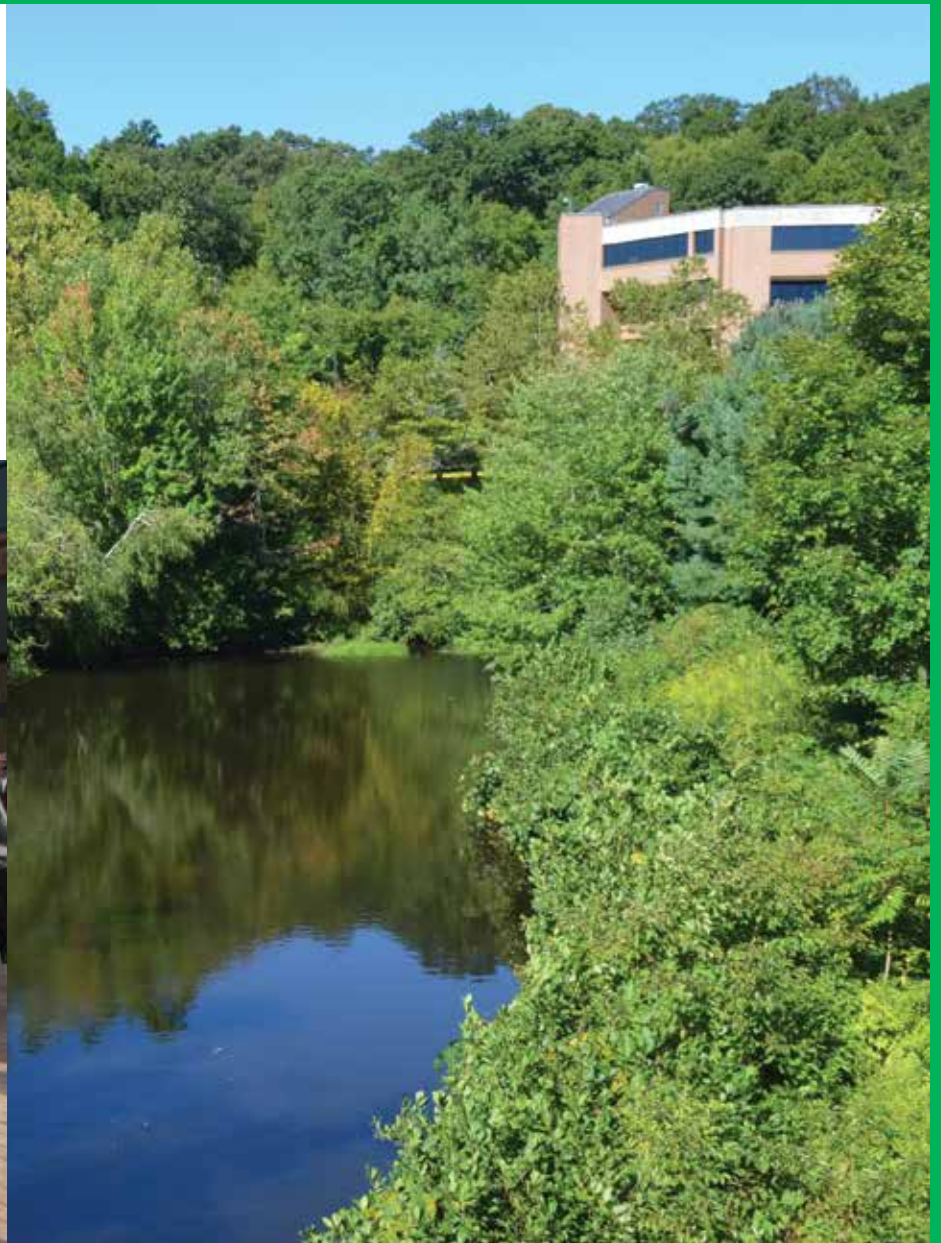




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Catalog 2016-17



Naugatuck Valley Community College

A State of Connecticut Two-Year Institution of Higher Education

750 Chase Parkway • Waterbury, Connecticut 06708-3089

www.nv.edu

Telephone Directory

Area Code: 203

Administration

President

Daisy Cocco De Filippis, 575-8044

Executive Assistant to the President

Beth Monchun, 575-8083

Provost and Senior Dean of Administration

James Troup, 575-8220

Assistant to the Provost and

Senior Dean of Administration

Susan Chase, 575-8089

Dean of Academic Affairs

Irene Rios-Knauf, 575-8116

Associate Dean of Academic Affairs

Ronald Picard, 596-8761

Dean of Student Services

Sarah E. Gager, 575-8086

Associate Dean of Danbury Campus

Antonio Santiago, 797-9361

Associate Dean of Information Technology

Conal Larkin, 575-8041

Dean of Community Engagement

Waldemar Kostrzewa, 575-8127

Director of Human Resources and

Labor Relations

Kimberly Carolina, 575-8056

Affirmative Action Officer

Ronald Clymer, 575-8110

Academic Division Directors

Allied Health, Nursing and Physical Education

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Business

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Liberal Arts and Behavioral/Social Sciences

Lisa Dresdner (*Associate Dean*), 575-8002

Science, Technology, Engineering & Mathematics

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College Support Services

Academic Center for Excellence (ACE)

Robert Sheftel, 596-8729

Admissions

Linda Stango, 575-8016

Center for Academic Planning
and Student Success (CAPSS)

Bonnie Goulet, 596-8752

Community and Economic Development

Laurie Hornbecker, 575-8031

Disability Services

Terry Latella, 596-8608

Distance Learning

Carrie Horvath, 575-8182

Event Planning

Main Number - 575-8226

Facilities

Robert Divjak, 575-8235

Finance and Administrative Services

Lisa Palen, 575-8100

Financial Aid

Catherine Hardy, 575-8167

Health and Environmental Safety

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Human Resources and Payroll

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Information Technology

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Job Placement Center (CJCPO)

Antony Wormack, 596-2143

Learning Resources Center (Library)

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Marketing and Public Relations

Sydney Voghel-Ochs, 575-8297

Registrar

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Student Activities

Karen Blake, 575-8269

Veterans' Affairs

Debbie DiCicco, 575-8006

Workforce Transition

Lucretia Sveda, 575-8221

Phone Directory

Admissions

(*application processing*)

575-8257

Admissions

(*application request*)

575-8040

Bookstore

575-8075

Bursar

(*financial aid and*

scholarship transactions)

575-8125

Bursar

(*all other transactions*)

575-8055

Child Development Center

596-8604

Counseling

575-8025

Danbury Campus

797-9361

Financial Aid

575-8274

Information

575-8000

Library

575-8024

Lifelong Learning

(*non-credit*)

575-8029

Public Safety

(*emergency*)

575-8112

(*non-emergency*)

575-8113

Registrar/Registration

596-2177

Services for Students

with Disabilities

Terry Latella, 596-8608

(*all other disabilities*)

Student Activities

575-8269

Student Government

596-2185

Testing Center

575-8215

Veterans Affairs

575-8006



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Welcome to Our College!

It is a joy to welcome you to Naugatuck Valley Community College, a caring and dynamic institution where students always come first. Surrounded by splendid gardens and grounds and served by talented and credentialed faculty, staff and administrators at our Waterbury and Danbury Campuses, the College offers comprehensive educational opportunities for those who are just beginning their education and those who are continuing their personal journey to a better future.

Our catalog presents prospective students with a rich and diverse array of career and academic programs, including allied health, aviation, cybersecurity, dance, digital arts, early childhood education, engineering technology, horticulture, hospitality management, human services, liberal arts, manufacturing, nursing, sciences, theater and many more. In addition, we participate in multiple transfer and articulation agreements designed to facilitate student transfers to the Connecticut State Universities and beyond.

Naugatuck Valley Community College (NVCC) takes pride in its historic role as an engine for change in the lives of our students and in the communities we serve through strong relationships with Connecticut agencies that promote educational, labor, economic and community development initiatives. To that end, we offer programs designed to inspire and promote engagement both on campus and in our communities. Our students benefit from the evening bus service which their predecessors helped bring to the citizens of Waterbury, UPASS- unlimited, free bus transportation- for registered students in Waterbury and Danbury, the federal GEAR UP grant funding for college preparation and the Advanced Manufacturing Technology Center which supports local workforce needs.

Our varied degree, certificate and non-credit program offerings make Naugatuck Valley Community College the place to be. A new academic year brings the promise of exciting new opportunities for students. In Waterbury, our learning commons along the 5th floor afford students quiet places to study or socialize. Our Academic Center for Excellence (ACE) offers tutoring services for all students and the Center for Academic Planning & Student Success (CAPSS) provides mentoring, academic advisement and counseling. These services are replicated on a smaller scale at our new Danbury Campus, in our Learning Commons which provides tutoring and library services and a quiet place to study, and our Student Center which offers a gathering place for students to relax and engage in campus sponsored activities. Whether on our Waterbury or Danbury Campus, NVCC is alive with cultural activities for students, their families and the communities we serve.

I am joined by the entire NVCC family in welcoming you to what will surely be a challenging and rewarding experience.

Sincerely,

Daisy Cocco De Filippis, Ph.D.
President



Daisy Cocco De Filippis, Ph.D.
President, NVCC





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Board of Regents for Higher Education, Connecticut State Colleges & Universities

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* Ex Officio

** NVCC Faculty Representative

*** NVCC Student Representative

PROGRAMS BY TITLE

The following listing is provided as a quick reference to the curriculum pages for each program and certificate.
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Non-credit Lifelong Learning Certificates

Non-credit certificates, workshops, seminars and short-term training courses are described in the latest semester course catalogs and can be accessed on the college website at nv.edu/nc. For more information call the Non-credit Lifelong Learning Office at 203-575-8029 or e-mail nc@nv.edu.

Bartending	Manufacturing	Security Officer
Basic Life Support & AED	Medical Administrative Assistant	Wedding Planner
Boating Safety	Medical Coding and Billing Specialist	Welding – SMAW (STICK)
Bookkeeper	Motorcycle Rider Education	Welding – GMAW (MIG)
Business	MS Office Essentials	Welding – GTAW (TIG)
Central Sterile Processing Technician	OSHA 10 General	Welding – FCAW (Flux-core)
Certified Nurse’s Aide (CNA)	Patient Care Technician	
Certified Wedding Planner	Personal Fitness Trainer	Wedding Planner
Events Management	Pharmacy Technician	Welding – SMAW (STICK)
Grant Writing	Phlebotomy Technician	Welding – GMAW (MIG)
Hospitality	QuickBooks	Welding – GTAW (TIG)
Human Services Assistant	Real Estate	Welding – FCAW (Flux-core)

Policy Changes

Naugatuck Valley Community College reserves the right to change requirements, courses, prerequisites, regulations, tuition, fees and other policies without prior notice. Upon written request, the President of the College may make waivers of these policies due to extenuating circumstances. The catalog does not constitute a contract and is for informational use only.

ACADEMIC CALENDAR FALL 2016 – SUMMER 2017

CREDIT COURSES - FALL SEMESTER 2016

Monday, August 29	Credit Classes Begin
Monday, September 5	Labor Day - College Closed
Tuesday, September 6	Last Day for Add/Swap
Sunday, September 11	Last Day 50% Refund
Monday, September 12	First Day Student-Initiated Withdrawal
Monday, September 12	“Late Start” Classes Begin
Tuesday, September 13	Last Day for Add/Swap for “Late Start” Classes
Monday, October 10	Columbus Day - Credit Classes in Session - College Open
Monday, October 17	Mid-Term Grades Due
Friday, November 11	Veterans’ Day - Credit Classes in Session - College Open
Tuesday, November 22	Last Day Student-Initiated Withdrawal
Wednesday, November 23	Veterans’ Day Observed - No Classes - College Open
Thursday, November 24	Thanksgiving Day - College Closed
Friday, November 25 - Sunday, November 27	Thanksgiving Recess - No Classes (<i>Limited Services</i>)
Tuesday, December 6 & Friday, December 9	Reading and/or Make-up Days (Instructor Discretion)
Saturday, December 10 - Friday, December 16	Final Examination Period
Saturday, December 17	Final Examination Make-up Day
Wednesday, December 21	Final Grades Due
Sunday, December 25	Christmas Day - College Closed
Monday, December 26	College Closed

CREDIT COURSES - WINTER SESSION 2016

Monday, December 19	Winter Session Begins
Friday, January 13	Winter Session Ends

CREDIT COURSES - SPRING SEMESTER 2017

Monday, January 2	New Year’s Day - College Closed
Monday, January 16	Martin Luther King Day Observed - College Closed
Thursday, January 19	Credit Classes Begin
Friday, January 27	Last Day for Add/Swap
Wednesday, February 1	Last Day 50% Refund
Thursday, February 2	First Day Student-initiated Withdrawal
Thursday, February 2	“Late Start” Classes Begin
Friday, February 3	Last Day for Add/Swap for “Late Start” Classes
Monday, February 13	Lincoln’s Birthday - Credit Classes in Session - College Open
Friday, February 17	Lincoln’s and Washington’s Birthday Observed - No Classes - College Open
Saturday, February 18 & Sunday, February 19	No Classes (<i>Limited Services</i>)
Monday, February 20	Lincoln’s and Washington’s Birthday Observed - No Classes - College Closed
Monday, March 13 - Sunday, March 19	Spring Break - No Credit Classes - College Open
Monday, March 20	Mid-Term grades Due
Friday, April 14	Good Friday - College Closed
Saturday, April 15	No Classes - College Closed
Sunday, April 16	Easter - No Classes - College Closed
Monday, April 17	Last Day Student-Initiated Withdrawal
Thursday, May 4	Reading and/or Make-up Day (Instructor Discretion)
Tuesday, May 9 - Monday, May 15	Final Examination Period
Tuesday, May 16	Final Examination Make-up Day
Thursday, May 18	Final Grades Due
Tuesday, May 23	Honors Night
Thursday, May 25	Commencement
Monday, May 29	Memorial Day - College Closed

CREDIT COURSES - SUMMER SESSION 2017

Monday, June 5	Summer Session & Special Session I Begin
Tuesday, July 4	Independence Day - College Closed
Friday, July 7	Special Session I Ends
Monday, July 10	Special Session II Begins
Friday, July 28	Summer Session Ends
Friday, August 11	Special Session II Ends

6 GENERAL OVERVIEW

Naugatuck Valley Community College resulted from the merger in 1992 of Mattatuck Community College and Waterbury State Technical College by the Connecticut General Assembly. The College's Role and Scope flows from the October 1992 comprehensive Mission Statement established by the Board of Trustees. The College's main campus is designated as the Central Naugatuck Valley Region Higher Education Center. The location serves as one of the regional offices of Charter Oak State College, Connecticut's external degree program and an off-campus location for Central and Western Connecticut State Universities, Starbase and Advanced Manufacturing programs of Kaynor Technical School.

The College, conveniently located at the crossroads of state highway 8 and Interstate 84, is accessible by public transportation. It serves over 25 towns and cities in the west central part of the State of Connecticut. Waterbury, with a population of over 110,000, and Danbury with a population of over 65,500 are considered the anchor cities in a region flanked by small rural and suburban communities. Recently, the college began increasing offerings in three Danbury locations: 190 Main Street, W.C.S.U., and at Danbury High School.

The College is comprehensive in its offerings of over 100 associate degree and credit certificate programs. In addition, the College offers hundreds of non-credit learning activities that are customized to fulfill industry specific training, job skills upgrading, and personal enrichment opportunities. Technical and technological education is a key component of our programs and services. Our specialized training programs serve the needs of the people and the industries of the State of Connecticut. Such diversity makes the institution a social, cultural and intellectual environment for people of all ages.

Learners range from youth in elementary and middle school, to young adults just out of high school, to mature adults returning for employment, retraining or leisure time activities. Learners who are non-native speakers of English take English as a Second Language (ESL) classes to help them achieve personal, professional and academic goals. Businesses and industries access additional training, learning resources, and cultural enrichment opportunities for their employees.

The institution accommodates the needs of the physically challenged. It houses Smart classrooms, large and small classrooms, specialized labs for science, art, and engineering; computer and technology labs; a learning resources center, a student center, and a fine arts center that provides spaces for music and drama productions.

LEARNING

The College provides services from a highly qualified full-time faculty complemented by a talented pool of instructors and trainers. Outstanding learner-centered instruction is central to our mission. NVCC prepares students for transfer to other institutions and for the world of work. A strong core of general education gives students a broad background that prepares them to change or modify career direction or to transfer to other institutions of higher education.

Degree and certificate programs include computer training, writing and research. For those who come to the College unprepared for its rigors, a developmental skills program supports critical thinking, writing, and math competency to help students succeed.

The College involves all students in mathematics, reading, and writing and provides students with supportive services in counseling, tutoring, testing, and individualized assistance.

The College has a number of liaisons with area elementary and secondary schools. The College Career Pathways prepares students in high school for direct entry into college curricula. The Connecticut Pre-Engineering Program for middle school students and the Kids-on-Campus Summer Program for elementary and

secondary students enrich both the College and the community.

NVCC offers additional supportive student services including advising, financial aid, health services, peer tutoring, services for veterans, minority student services, a bookstore, student government, student organizations and activities.

There are a number of collaborative Community College System initiatives including the Center for Teaching, the College of Technology, the Basic Skills Testing and Placement Program, and the Business and Industry Services Network.

PUBLIC (COMMUNITY) SERVICE

Art, dance, drama, film and music presentations are regular offerings at the college as the instructors develop student and community potential in the performing and fine arts. The magnificent stages, workshops, dance and music studios provide the faculty, students, and community with settings that make the classrooms come alive with sight and sound.

The Max R. Traurig Library is open to visitors from the community and provides the region with a collection of over 50,000 books, print subscriptions to magazines, journals, and newspapers, and COs and DVDs for education and entertainment.

Members of the community, including Alumni, may also visit the Library to sign up for a Community Borrower account, which allows for book borrowing, use of Library computers and on-campus access to Wi-Fi, electronic periodical databases, and electronic books.

STRATEGIC PLANNING

NVCC is currently developing a ten-year Strategic Plan. It will be published on the college website. The plan covers the academic years from September 2016 to May 2026.

THE NVCC MISSION

Naugatuck Valley Community College offers quality, affordable education and training in response to evolving community needs by providing opportunities to individuals and organizations to develop their potential.

THE NVCC VISION

At NVCC, the word "community" is central and our students are considered our most sacred trust and our finest asset. Collaboration within and outside the confines of our immediate surroundings defines our actions and is the base for the rich intellectual, educational, cultural and civic-minded experiences we provide our students.

FIVE GOALS

1. At NVCC, students achieve their goals.
2. NVCC faculty and staff make a difference—at the college, in the community, in their fields of study and in the lives of students.
3. NVCC programs meet and beat academic and industry standards.
4. NVCC is an engine of change within Waterbury and the broader community.
5. NVCC is an effective, performance-based institution.

In addition to these five goals, the Plan outlines 15 strategic initiatives—what we will do to meet these goals.

TEN ANTICIPATED OUTCOMES: WHAT WILL BE DIFFERENT BY 2016

1. FTE enrollment will increase by 10%.
2. Retention rate for first-time, full-time freshmen will increase by 10%, bringing NVCC closer to the top tier nationally for community college retention.
3. Graduation rate will increase by 57%, achieving the community college national average.

GENERAL OVERVIEW

4. Graduation rate for underrepresented students will increase by 75%.
5. Increase the total number of degrees and credit certificates by 57% and non-credit certificates by 15%.
6. Job placement rate of completers within a year after graduation will increase by 10%.
7. 90% of completers of degrees or certificates in high-demand careers will have secured a job relevant to their study or will have transferred to another higher education program within a year.
8. Annual transfer headcount to four-year colleges will increase by 25%
9. Current and future community and employer partnerships will become models for best practices and impact.
10. External funding portfolio for campus-driven initiatives will increase by 25%.

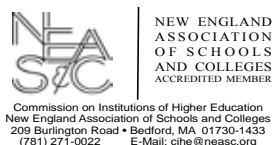
ACCREDITATION STATEMENT

Naugatuck Valley Community College is accredited by the New England Association of Schools and Colleges, Inc. through its Commission on Institutions of Higher Education.

Accreditation of an institution of higher education by the New England Association indicates that it meets or exceeds criteria for the assessment of institutional quality periodically applied through a peer review process. An accredited college or university is one which has available the necessary resources to achieve its stated purposes through appropriate educational programs, is substantially doing so, and gives reasonable evidence that it will continue to do so in the foreseeable future. Institutional integrity is also addressed through accreditation.

Accreditation by the New England Association is not partial but applies to the institution as a whole. As such, it is not a guarantee of every course or program offered, or the competence of individual graduates. Rather, it provides reasonable assurance about the quality of opportunities available to students who attend the institution.

Inquiries regarding the accreditation status by the New England Association should be directed to the administrative staff of the institution. Individuals may also contact:



The College is also accredited by the Connecticut Board of Governors for Higher Education.

In addition to comprehensive accreditation by the New England Association of Schools and Colleges, some degree and certificate programs have the following specialized accreditations:

- Committee on Accreditation in Physical Therapy Education
- Commission on Accreditation for Respiratory Care
- Joint Review Committee on Education in Radiologic Technology
- National Association for the Education of Young Children
- National Institute for Automotive Service Education (ASE)
- National Automotive Technicians Education Foundation (NATEF)
- Accreditation Commission for Education in Nursing (ACEN)
- National Association of Landscape Professionals (NALP)
- Engineering Technology Accreditation Commission of ABET, <http://www.abet.org>.

STATUTORY MANDATE

The legislative mandate for community-technical colleges, as provided in Public Act 92-126, Section 27(a) states:

- a. The primary responsibilities of the regional community-technical colleges shall be:
 1. to provide programs of occupational, vocational, technical and technological and career education designed to provide training for immediate employment, job retraining or upgrading of skills to meet individual, community and state man-power needs;
 2. to provide programs of general study including, but not limited to, remediation, general and adult education, and continuing education designed to meet individual student goals;
 3. to provide programs of general study for college transfer representing the first two years of baccalaureate education;
 4. to provide community service programs as defined in subsection 5(b) of this section;
 5. to provide student support services including, but not limited to, admissions, counseling, testing, placement, individualized instruction and efforts to serve students with special needs.
- b. As used in this section, "community service programs" mean educational, cultural, recreational and community-directed services which a community-technical college may provide in addition to its regular academic program. Such community service programs may include, but shall not be limited to:
 1. activities designed to enrich the intellectual, cultural and social life of the community;
 2. educational services designed to promote the development of skills for the effective use of leisure time;
 3. activities and programs designed to assist in the identification and solution of community problems; and
 4. utilization of college facilities and services by community groups to the extent such usage does not conflict with the regular schedule of the college.

CONTINUING NOTICE OF NONDISCRIMINATION

Naugatuck Valley Community College does not discriminate on the basis of race, color, religious creed, age, sex, national origin, marital status, ancestry, present or past history of mental disorder, learning disability or physical disability, sexual orientation, gender identity and expression or genetic information in its programs and activities. In addition, the College does not discriminate in employment on the additional basis of veteran status or criminal record.

The following individual has been designated to handle nondiscrimination policies regarding disability policies: **Robert Divjak, Director of Facilities/Section 504/ADA Coordinator, Room C216, Naugatuck Valley Community College, 750 Chase Parkway, Waterbury, CT 06708; 203-575-8235**. The following individual has been designated to handle nondiscrimination policies regarding sex discrimination as well as other forms of prohibited discrimination: **Jacque Swanson, Associate Director of Human Resources/Title IX Coordinator, Room K704, Naugatuck Valley Community College, 750 Chase Parkway, Waterbury, CT 06708; 203-575-8043**.

THE NAUGATUCK VALLEY COMMUNITY COLLEGE FOUNDATION, INC.

The NVCC Foundation raises funds to support the students, programs, and services of the college. The non-profit organization is led by a talented, volunteer board of community leaders. Foundation efforts help fund scholarships, tutoring, instruction, and equipment.

The NVCC Office of Community Engagement (OCE) works closely with the NVCC Foundation to plan special events, fundraising appeals, and dedication ceremonies. Appeals to support NVCC goals are directed to faculty, staff, students, alumni, communities, and businesses. Donors should contact the OCE director for more information.



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ADMISSIONS INFORMATION

ADMISSION POLICY

Naugatuck Valley Community College is an open admission institution with selective placement into some programs and courses. Acceptance to any degree or certificate program requires that an applicant be a graduate of an approved secondary school or have earned either a State High School Equivalency Diploma or a General Educational Development (G.E.D.) diploma. Graduating high school seniors are accepted into a degree or certificate program and permitted to register prior to their date of high school graduation under the condition that they submit proof of high school completion by July 7 of the year in which they graduated high school. Failure to do so will result in the student being removed from their program of study and switched to non-degree status.

Admission to the College does not necessarily mean admission to all courses and programs. Several degree and certificate programs have specific admissions criteria. Please refer to the Programs of Study section of the catalog for specific admission requirements.

Students who do not have a high school diploma or its equivalent may enroll at the College as non-degree students. **Non-degree students are not eligible for financial aid, but may take advantage of the Connecticut Tuition Payment Plan.**

High school students who demonstrate sufficient scholastic ability and who present written approval from their high school principal or a designated representative may register for courses as non-degree students on a space available basis.

Students may gain admission to Naugatuck Valley in either the fall semester (August) or spring semester (January). In some programs, admission is specifically for the fall or spring semester only.

Classes are offered days, evenings and weekends, as well as online. Part-time students enroll for a maximum of 11 credits; full-time students enroll for a minimum of 12 credits. Courses vary in the amount of credit they carry; however, most courses are worth three (3) credits.

Admission to English as a Second Language Courses

The English as a Second Language (ESL) courses at Naugatuck Valley Community College are designed to serve the needs of non-native speakers of English. The ESL Department offers a multi-level program to increase students' proficiency in English in all four areas: reading, writing, listening and speaking.

In addition to the basic application procedures, a writing sample and the English Proficiency (LOEP) portion of the Accuplacer Placement Test must be completed before students can register for the courses. The English placement for non-native speakers of English is determined by the ESL office and is based primarily on these tests.

Admission to Nursing and Allied Health Programs

Applicants to the **Physical Therapist Assistant** Program must apply by October 15 for the following spring.

Applicants to the **Radiologic Technology** and **Respiratory Care Associate Degree Programs** must apply by **January 15** of the year they are seeking admission and prerequisites must be completed by January 15.

Applicants to the **Associate Degree Nursing Program** must apply by **February 1** and all prerequisites must be completed by February 1, except for the Anatomy and Physiology II prerequisite, which must be completed no later than the spring semester of the application deadline.

Each program has specific admission criteria which can be found in the Programs of Study section of the catalog. Admission to these programs is highly selective and based on academic record and assessment testing. A program application for admission must be submitted in addition to the College Application.

Admission to Technology Degree and Certificate Programs

In addition to the standard requirements necessary for admission to the College, students applying for admission to technical degree and

certificate programs should possess a solid background in science and mathematics. Refer to the programs of study section of the catalog for details.

ADMISSION TO NON-CREDIT LIFELONG LEARNING PROGRAMS

Non-credit programs are open to all citizens in the region for professional and personal development. Formal college application is not required. Registration is accepted for all courses. Certification programs have specific requirements that should be understood prior to registering. Customized programs are specially tailored for organizations and companies that address workforce demands/needs. Lifelong learning staff are available to provide information.

APPLICATION DEADLINES

The College admits students on a first-come, first-served basis. For the fall semester, which begins in late August or early September, preference is given to applications received by **June 1**. For the spring semester, which begins in January, preference is given to applications received by **December 15**. Applicants will be accepted after these dates provided openings are available.

Applications for the Physical Therapist Assistant Program are available in **April** and must be submitted by **October 15**. Applications for Radiologic Technology and Respiratory Care Programs are available in **October** and must be submitted by **January 15**. The online application for the Nursing Program is available **November 1** and must be submitted by **February 1**.

APPLICATION PROCEDURES

New Students

The following procedures apply to all individuals planning to enroll in degree or certificate programs for the fall or spring semesters:

- Complete an Application for Admission and submit it with the non-refundable \$20.00 application fee to the Admissions Office, Naugatuck Valley Community College, 750 Chase Parkway, Waterbury, Connecticut 06708. (Checks should be made payable to NVCC.) Students may also apply online at nv.edu/admissions using a credit card to pay the \$20.00 application fee.
- Request that an **official** copy of the high school transcript with date of graduation be sent directly to the Admissions Office from the Guidance Department at the high school, or supply a copy of the high school diploma.* Equivalency Diploma recipients must submit a copy of the equivalency diploma or G.E.D. results.

** Applicants who are presently in high school may submit their completed application form and \$20.00 application fee directly to their high school guidance office. The Guidance Office will forward the application, fee and high school transcript directly to the Admissions Office.*

- All new and transfer students seeking admission into a degree program who were born after 12/31/56 are required by state law to submit immunization documentation for two (2) doses of measles, mumps and rubella (MMR). Those born as of 1/1/80 also need to submit documentation for two (2) doses of varicella (chicken pox).

Placement Test (ACCUPLACER®)

All new and transfer students enrolling in degree or certificate programs are required to take the placement test, unless an exemption is granted. NVCC uses the Accuplacer computerized adaptive placement test to assess academic skills in English, reading and mathematics. Advisors will use the results to make decisions about the level of courses students are prepared to take. This is not an admission test. Prior to taking the test, an application for admission must be completed. Applicants will receive information on test

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schedules by e-mail once their application has been processed.

An exemption may be granted to students who:

- completed coursework in a college level English and/or math course with a grade of "C" or better
- scored 500 or higher on the SAT Math exam
- scored 18 or higher on the ACT Math exam
- scored 530 or higher on the SAT English exam (Critical Reading or Writing portions)
- scored 21 or higher on the ACT English exam OR scored 47 or higher on the ACT English and Reading portions combined
- have achieved the appropriate Advanced Placement (AP) or College Level Examination Program (CLEP) scores
- have taken the ACCUPLACER® placement test at another community college or university

Appropriate documentation (transcripts, final semester grade report, SAT or ACT score report, ACCUPLACER® score report, AP scores, CLEP scores) must be submitted to the Admissions Office for review to determine if the requirements for exemption are met.

Students are encouraged to schedule their test as soon as possible to ensure availability of classes at the time of registration. Appointments for the Waterbury Campus can be scheduled on www.timecenter.com/nvccetest. For Danbury Campus, call 203-797-9361.

If you have a documented learning disability and will require testing adjustments, please contact the Counselor for Students with Learning Disabilities at (203) 596-8608. For all other documented disabilities, please contact the Coordinator of Disability Services at (203) 575-8035. To obtain adjustments, you must schedule an appointment with the appropriate individual and provide documentation that describes your disability and supports the need for these adjustments. This should be done at least one week prior to the test date. Adjustments will only be provided to those individuals who have completed this process.

Transfer Students

Transfer students who have not previously attended Naugatuck Valley must follow the procedures for New Students.

Students who are interested in receiving credit for course work completed at another institution must request that an official copy of their college transcript be sent to the Admissions Office at Naugatuck Valley. Students who have attended institutions outside Connecticut should also provide course descriptions for the courses they would like to transfer.

Transfer credit may be granted for comparable courses completed at regionally accredited colleges and universities. The total amount of transfer credit granted may not exceed 75 percent of the credits required by the College in a specific program. Transfer credits will not be used in the calculation of grade point averages. For more information see "*Transfer Courses*" section.

Placement testing may be waived for transfer students who have earned an associate's degree or higher or who have completed college level English and/or mathematics with grade of "C" or better. SAT or ACT scores may also be acceptable.

IMMUNIZATION REQUIREMENTS

By law, all higher education institutions in Connecticut require each full-time or matriculating student born after December 31, 1957 to provide proof of adequate immunizations before permitting the student to enroll.

New and Transfer Students

If you were born after December 31, 1956, Connecticut State Law requires that all full-time (degree seeking and non-degree/

non-matriculating) and part-time matriculating students enrolled in postsecondary schools be adequately protected against measles, mumps and rubella (MMR). In addition, all full-time and matriculating students, except those born in the continental United States prior to January 1, 1980, must provide proof of immunization against varicella (chicken pox). Students must have two (2) doses of each vaccine administered at least one (1) month apart to insure adequate immunization.

Exemptions: Any student (new or transfer) who (1) presents a certificate from a physician stating that in the opinion of the physician such immunization is medically contraindicated; (2) provides a written statement that such immunization would be contrary to their religious beliefs; (3) provides a laboratory report documenting immunity; or (4) provides a physician's statement of confirmation of disease.

If students are unable to provide the above data due to a documented medical condition, an explanatory statement on office letterhead from an attending physician must be submitted to the college. Students may present serologic (blood test) evidence in place of the vaccination to verify immunity. An actual laboratory report must be presented documenting immunity.

- The law also allows for exemption due to religious beliefs. A student requesting a religious exemption must submit a written statement that such immunization would be contrary to his/her religious beliefs.
- Failure to comply with these guidelines will prevent course registration, release of transcripts, and eligibility for financial aid.
- In the event of an outbreak of measles, mumps, rubella or varicella on this campus, students who are not in compliance (including a medical or religious exemption), will be excluded from classes for a minimum of 18 days per incubation period or until their immunizations are complete.

INTERNATIONAL STUDENT ADMISSION

Students who are not citizens or permanent residents of the United States, but who are interested in studying at Naugatuck Valley Community College, may do so by applying as international students.

Application Deadlines for F-1 Applicants

Students are admitted for the fall and spring terms. We recommend that international students apply by the following dates:

- The fall term begins in August; the application deadline is June 15.
- The spring term begins in January; the application deadline is November 1.

International students planning to attend Naugatuck Valley on an F-1 student visa must present the following documents:

Admission Application and Fee

- A Naugatuck Valley Community College application and non-refundable \$20 fee are required. The application form is available as a downloadable PDF file at nv.edu/Apply or you can request it by mail from the Admissions Office. The college's web application process is not designed for use by international students. You must mail your application along with your check or money order for \$20 (converted to U.S. currency and payable to NVCC). Do not send currency.

You must present the following documents with your completed application form:

Academic Records

- Proof of your graduation from high school or university, in the form of a diploma or transcript (translated to English). You may be asked to use a foreign transcript evaluation service, such as

ADMISSIONS INFORMATION

the following:

- World Education Services
- P.O. Box 5087
- Bowling Green Station
- New York, NY 10274
- Phone (212) 966-6311 or (800) 937-3895
- Fax (212) 739-6100
- www.wes.org
- American Association
- of Collegiate Registrars & Admissions Officers
- International Education Services
- One Dupont Circle, NW, Suite 520
- Washington, D.C. 20036-1135
- Phone (202) 296-3359
- <http://ies.aacrao.org>

Immunization Records

Proof of immunization must be provided. Refer to the section on immunization requirements.

Evidence of English Proficiency

International students are required to submit proof of English proficiency. Preferably, applicants should take the TOEFL test and achieve a score of 500 on the paper test or 61 on the Internet-based test. The IELTS exam is also acceptable. Enrollment in English as a Second Language coursework may be required until a higher level of English proficiency is attained.

Forms and Documentation Needed for Form I-20

International students who are in F-1 visa status, or who need F-1 visa status, must work with the international student advisor to obtain the Form I-20. In order to receive the Form I-20, international students must prove that they have the funds immediately available to pay for the first year of tuition and living expenses. To apply for the I-20, students must submit the forms and documentation listed below.

1. International Student Information Sheet.
2. Certification of Finances: This form contains a summary of the student's financial resources and ability to pay for tuition, fees, and living expenses.
3. Promise of Cash Support signed by the sponsor and notarized: This form states that the sponsor will assume some or all responsibility for the student's expenses during his/her stay in the U.S. The form must be supplemented by bank documentation proving availability of the promised funds.
4. Promise of Free Room and Board: This form is necessary if a local sponsor is providing the student's housing and food.
5. Copy of passport identity pages.
6. Students who are already in the U.S. should provide copies of the I-94 card and visa stamp. Students applying from outside the U.S. will need to bring these documents to the international student advisor upon arrival.

The Form I-20 will not be issued until all of the above items have been received and the applicant has been admitted. Students will then be advised on how to pay the \$200 SEVIS fee required by the Department of Homeland Security. Please contact the International Student Advisor with any questions or concerns: (203) 575-8010.

Housing

There are no dormitories on campus. International students must arrange for their own housing.

Transportation

NVCC is a commuter college and students are expected to make arrangements for transportation to and from the College. Upon verification of payment of the student activities fee, credit students

qualify for a local Waterbury bus pass. International students may not be immediately eligible for a Connecticut driver's license.

Tuition, Fees and Living Expenses for 2015-2016

Tuition and Fees* (based on 12 credits per term)	\$12,136
Books and supplies	1,200
Room and Board	1,909
Transportation	2,229
Personal Expenses	2,101
Total	\$ 19,575

* Subject to change

The above is only an estimate. International students with families need to add \$1,500 per dependent accompanying them.

Out-of-State Fees

All holders of temporary visas (e.g. F, J, and H) will be charged the out-of-state tuition rate, unless and until they present evidence of an approved or pending change to permanent residency, as well as evidence that establishes Connecticut residency in accordance with state law.

Transferring In for International Students

If you are transferring to Naugatuck Valley from another school in the United States, you must follow these additional steps:

1. Provide a copy of your current I-20
2. Notify the DSO (Designated School Official) at your current school that you plan to transfer to NVCC and ask him/her to:
 - a. Enter into the SEVIS information system your "intent to transfer."
 - b. Enter into SEVIS a "transfer release date."
 - c. Complete the bottom portion of the Transfer Verification Form (available from the NVCC International Student Advisor).

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 seeking students. Non-degree students complete a College Admissions Application at the time of registration and pay the one-time \$20.00 application fee. In some cases, non-degree students may be required to take academic skills assessment tests in English or mathematics and/or provide proof that prerequisites for specific courses have been met. Non-degree students are not eligible for financial aid, but may take advantage of the Connecticut Tuition Payment Plan. Non-degree students are not permitted to register for a full-time course load (12 credits or more).

UNDERAGE STUDENTS

All students under the age of 18 must complete the following prior to registering for classes:

- Application form and \$20.00 Application Fee
- Secondary Education Validation Form and the Accuplacer® Assessment Test
- Interview with the Assistant Director or the Director of Admissions. The interview is mandatory.

Students who will be turning 18 years of age during their year of graduation from high school and will not be attending the college until after their high school graduation do not need to complete the Secondary Education Form or meet with the Director or Assistant Director.

At Naugatuck Valley Community College, Family Educational Rights and Privacy Act (FERPA) rights belong to the student, regardless of age. A "student" is a person who attends an educational institution that maintains educational records or personally identifiable

14 ADMISSIONS INFORMATION/REGISTRATION AND RECORDS

information. Parents of community college students do not have a right to access their children's student records. In accordance with this regulation, students' college records will be released to parents only with the observed written consent of the student.

SENIOR CITIZENS

The application fee and all general fees are waived for any Connecticut resident 62 years of age or older who has been accepted for admission. Tuition is waived for Connecticut residents 62 years of age or over on a space available basis. Special fees other than the application fee must still be paid. Registration under this waiver begins on the first day of the semester and is restricted to classes with available seats. Non-credit Lifelong Learning courses are not eligible for tuition waiver.

VETERANS

In addition to completing the basic application procedures, veterans should contact the Veterans' Affairs Office at the College prior to registering for classes. Once registered, the Veterans' Affairs Office will certify enrollment to the Veterans' Administration. To expedite the process of applying for benefits, the veteran should bring a DD214 (separation papers).

According to the Dependent Educational Assistance Act, wives and children of totally disabled veterans, widows and children of deceased veterans, and 100 percent totally disabled veterans are eligible to receive educational assistance while attending school. To expedite the process of applying for benefits, supporting documentation such as a marriage or birth certificate should be brought to the Veterans' Affairs Office. Veterans who served on active duty during specific periods of conflict may be eligible for tuition waivers. For more information, call Veterans' Affairs.

NVCC Office of Veteran Affairs offers a Veterans' Room where they can meet, network, and share experiences. The Veterans' Oasis is located in S411.

ADMISSION WITH ADVANCED STANDING

Academic Credit for Military Experience

Veterans may obtain transfer credit for courses successfully completed in the United States Armed Forces schools, provided that such courses are judged the equivalent of, and are applicable toward, degree requirements. Three credits in physical education are also granted for the completion of Basic Training.

Academic Credit for Work/Life Experience

Naugatuck Valley promotes the practice of awarding credit in recognition of learning acquired through life experiences such as employment, volunteer activities, military training, special seminars and other methods. Students may apply for the evaluation of prior learning through one or more of the procedures listed:

Credit by Examination - Students may elect to have prior learning evaluated by either of the following examination options:

- College Level Examination Program (CLEP)
- The College Level Examination Program (CLEP) allows individuals to earn college credit for what they already know. NVCC awards credit for successful scores on CLEP exams. CLEP tests may be taken at Naugatuck Valley through the Testing Center.
- Credit by Examination - Some divisions and departments of the College produce their own examinations. Please contact Program Coordinators and Chairpersons.

Academic Credit for College Career Pathways (formerly Tech Prep)

A high school graduate who was registered as a CCP student at their high school through the CCP program can apply their earned college credits toward a program of study at Naugatuck Valley Community College. A qualified high school student had to successfully complete approved articulated courses in 10th, 11th

and/or 12th grade with a grade of "C" or better. The CCP student may be required to take the placement tests at the College. Parents of students under the age of 18 may be required to sign a parental consent form. For more information, contact the Academic Dean's Office.

Advanced Placement

Degree credit will be granted on the basis of scores on the Advanced Placement Examinations administered by the College Entrance Examination Board. Students who earn scores of 3 or higher receive credit for the courses for which the examinations are stipulated as measures. AP transcripts can be obtained by contacting the College Board @ 888-308-0013 or at www.collegeboard.com.

NEW ENGLAND BOARD OF HIGHER EDUCATION (NEBHE) RECIPROCAL PROGRAM

Naugatuck Valley Community College is authorized to participate in the NEBHE Reciprocal Program which is designed to encourage interstate enrollments in publicly supported degree granting institutions. A reciprocal agreement has been arranged among the six New England states to implement this program. Under this agreement, students enrolled in the NEBHE program pay tuition and fees which are substantially less than those listed for out-of-state residents.

A New England resident is eligible to participate in the program provided:

- The program of study is not offered at an in-state institution.
- The program of study is offered at both in-state and out-of-state institutions and the out-of-state institution is closer in traveling time to the applicant's legal residence.

Applicants must meet the admission requirements of the College and fall within the quota arrangements of the program. All other out-of-state applicants are required to pay the non-resident tuition and fees.

The NEBHE program is subject to change at any time.

CATALOG YEAR POLICY

Students are responsible for completing the requirements for their major and degree that were in place upon their admittance to the College as matriculated (degree-seeking) students - this is considered the student's catalog year. (Note: If a student is readmitted to the College following a withdrawal or dismissal, he or she is responsible to complete the requirements in place on the new matriculation date.) Students may change their catalog year to the most current for their major by contacting the Registrar.

REGISTRATION PROCEDURES

New Students

Applicants who have been admitted to a degree or certificate program will be invited by e-mail or mail to register for courses by the Admissions Office at a specified date and time. Students must call to set up an appointment for a New Student Success Session.

Continuing Students

Continuing students and readmitted students may register during the current semester for the following semester. Times and locations for registration are announced by the registrar.

Former Students Seeking Readmission

Readmit students are those who have previously been accepted and who have attended Mattatuck Community College, Waterbury State Technical College, Naugatuck Valley Community-Technical College or Naugatuck Valley Community College, but who have been away from the College for two years or more.

A student to be readmitted to the college should:

- Obtain a Readmission Form (available from the Office of the Registrar or program advisor/coordinator or online: nv.edu/admissions).
- Meet the advisor/program coordinator to review the program's current requirements, and plan course selection.

REGISTRATION AND RECORDS

- Unless previously tested, make arrangements to take the placement test through the Testing Center.
- If required, provide written documentation regarding proof of measles, mumps, rubella, and varicella (chicken pox) immunization to the Office of the Registrar (unless previously provided).
- Contact the Naugatuck Valley Community College Office of the Registrar to ensure that official copies of high school and college transcripts are still on file, especially if the student has been away from the College for five years or longer.
- Submit official college transcripts if the student has attended another college or university while away from Naugatuck Valley Community College, to the Office of the Registrar K516.
- The advisor/program coordinator may advise the student to invoke the **Fresh Start** Option. This option is only available to students with a cumulative GPA less than 2.0 and after an absence of two or more years. A student may invoke a Fresh Start Option only once at Naugatuck Valley Community College and must do so prior to or during the semester of readmission.

Readmit Students - Fresh Start Option

A student readmitted to Naugatuck Valley after an absence of two or more years (four semesters, not including summer) may return without the handicap of a grade average of less than 2.0 earned previously at Naugatuck Valley Community College. To do so, the student must invoke the **Fresh Start Option**. This Option permits previous grades to be removed from the grade point average. Credit is kept for all courses passed with grades of “P”, “C-”, or higher. There is no credit for previous courses in which grades of “D+” or lower were earned. All courses and grades remain on the record.

A student may invoke Fresh Start Option only once at Naugatuck Valley Community College and must do so prior to or during the semester of readmission. Since Naugatuck Valley is an “open admission/selective placement” college, neither the use of Fresh Start Option nor repeat poor performance precludes further readmission(s) of the student.

The Fresh Start Option does not apply to any completed degree or certificate. A student must complete a minimum of 15 credits after returning to college under the Fresh Start Option to be eligible for a degree or certificate and for graduation honors.

Note: For purposes of grade point average, credit, and Fresh Start Option, courses previously taken at Waterbury State Technical College and/or Mattatuck Community College are considered to be courses taken at Naugatuck Valley Community College.

LIFELONG LEARNING REGISTRATIONS (NON-CREDIT)

Learners taking non-credit certificates or individual courses should refer to the most current semester catalog of courses for up-to-date information, registration methods, and dates. Generally, citizens may register in person, by mail, by phone, and by fax. Registration is ongoing. Check the start-up date for your course and register early. Courses are filled on a first-come, first-serve basis. Formal college admission is not required.

TRANSFER COURSES

Students may take courses at another college to be transferred to Naugatuck Valley Community College for credit. It is the student’s responsibility to have an official transcript of the course work sent to the Record’s Office of NVCC for evaluation purposes. This transcript will be evaluated by the associate registrar and acceptable courses will be posted to the student’s academic record. Students are encouraged to consult the associate registrar to ensure the transferability of a course from another institution before enrolling in the course. Transfer credit shall be awarded for comparable courses completed at other regionally accredited higher education institutions. Only credits for courses with grades of “C” or better or a grade of “P” are accepted

in transfer only if transcript legend defines “P” as representing a grade of “C” or better. The letter grade(s) assigned by the other institution shall not be recorded or included in the computation of the student grade point average.

Notwithstanding the number of degree credits which shall be granted in accordance with the foregoing, the student must complete at least 25 percent of the minimum credit requirements for the degree through coursework at the college awarding the degree.

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.

CROSS REGISTRATION

Full time students (12 or more credits) may be able to take up to two additional courses for no cost at another state-supported institution of higher education (including the Connecticut State Universities and the University of Connecticut) on a space-available basis if the course is not offered at NVCC.

COURSE OVERLOADS

Course overloads will not be granted. However, in extenuating circumstances, division directors, with the approval of the Dean of Academic Affairs, may authorize overloads to courses that have reached their limit (closed).

COURSE CANCELLATIONS AND CHANGES

Students will be notified by mail, e-mail, or phone of course cancellations. Courses may be cancelled due to insufficient enrollment. Faculty names and room assignments are subject to change due to required adjustments in the schedule. Students are encouraged to check their course schedules before arriving to their first session to verify the assigned room

REGISTRATION BETWEEN CONNECTICUT COMMUNITY COLLEGES

Tuition and fees for students who register for general fund/tuition account courses at multiple colleges within the community-technical college system shall be charged as follows:

- Full-Time Students—Students who have paid the tuition and fees of a full-time student at their “home” institution shall be exempt from further charges. Copies of the student tuition and fee receipt from the “home” institution should be accepted by the “host” institution in lieu of payment.
- Part-Time Students - The charges for students who have paid the tuition and fees of a part-time student at their “home” institution and register for additional courses at a “host” institution shall not exceed the amount charged for a full-time student, if the student’s combined registration at the “home” and “host” institutions would classify them as a full-time student. Copies of the student’s tuition and fee receipt from the “home” institution should be accepted by the “host” institution, and the “host” institution should charge the difference between the full-time charges for tuition and fees and amount paid to the “home” institution as indicated on the “home” institution receipt. The “host” institution must notify the “home” institution of the multiple college registration. Any changes in student status which warrant a refund of tuition and fees will be based on the combined registration at the “home” and “host” institutions. Students who register at multiple colleges whose combined student status is less than full-time shall be charged tuition and fees as a part-time student for the semester credits registered at each of the respective colleges.

16 REGISTRATION AND RECORDS/FINANCIAL AID INFORMATION

SUMMER AND WINTER SESSIONS

Naugatuck Valley Community College welcomes students from other colleges and universities who wish to make up a course or earn advanced standing at their home institution. Credits earned at Naugatuck Valley Community College are generally acceptable at other colleges, but students are advised to consult their home institutions for information regarding transfer of credit.

Naugatuck Valley Community College students may attend the summer or winter session to lighten their study load during the regular academic year or to reduce the time needed to earn their degrees or certificates. Students are encouraged to check the appropriateness of their course selection with their advisors. Course offerings may be viewed online or printed from the College website at nv.edu.

STUDENT RECORDS

Notification of Rights under the Family Educational Rights and Privacy Act (FERPA)

The Family Educational Rights and Privacy Act (FERPA) affords students certain rights with respect to their education records. These rights include:

1. **The right to inspect and review the student's education records within 45 days of the day the College receives a request for access.** Students should submit to the registrar, dean, head of the academic department, or other appropriate official, written requests that identify the record(s) they wish to inspect. The College official will make arrangements for access and notify the student of the time and place where the records may be inspected. If the records are not maintained by the College official to whom the request was submitted, that official shall advise the student of the correct official to whom the request should be addressed.
2. **The right to request amendment of an education record that the student believes is inaccurate.** Students may ask an appropriate College official to amend a record that they believe is inaccurate. The student should write to the College official, clearly identify the part of the record he or she wants changed, and specify why he/she believes it is inaccurate. The College will notify the student of the decision. If the College decides not to amend the record as requested by the student, the College will advise the student of his or her right to a hearing regarding the request for amendment. Additional information regarding the hearing procedures will be provided to the student when notified of the right to a hearing. **NOTE:** FERPA is not intended to provide a process to question substantive judgments that are correctly recorded. For example, the right of challenge does not allow a student to contest a grade in a course because the student believes that a higher grade should have been assigned.
3. **The right to consent to disclosure of personally identifiable information contained in the student's education records, except to the extent that FERPA authorizes disclosure without consent.** FERPA permits disclosure without consent to school officials with legitimate educational interests. A "school official" includes but is not limited to the following: a person employed by the College in an administrative, supervisory, academic, research or support staff position (including law enforcement and security personnel, counseling and health staff); a person or company with whom the College has contracted (such as an attorney, auditor, collection agent or official of the National Student Clearinghouse); a person serving on the Board of Trustees who is authorized to act on its behalf; or a student serving on an official committee, such as a disciplinary or grievance committee, or assisting another school official in performing his or her tasks. A school official has a

legitimate educational interest if the official needs to review an education record in order to fulfill his or her professional responsibilities.

FERPA also permits disclosure of education records without consent in connection with, but not limited to:

- To comply with a judicial order or a lawfully issued subpoena;
 - To appropriate parties in a health or safety emergency;
 - To officials of another school, upon request, in which the student seeks or intends to enroll;
 - In connection with a student's request for or receipt of financial aid, as necessary to determine the eligibility, amount or conditions of the financial aid, or to enforce the terms and conditions of the aid;
 - To certain officials of the U.S. Department of Education, the Comptroller General, to state and local educational authorities, in connection with certain state or federally supported education programs;
 - To accrediting organizations to carry out their functions;
 - To organizations conducting certain studies for or on behalf of the College;
 - The results of an institutional disciplinary proceeding against the alleged perpetrator of a crime of violence to the alleged victim of that crime with respect to that crime.
 - Directory information as defined in the policy of the Board of Trustees.
4. **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 paragraph 3 above. To do so, a student exercising this right must notify the Office of Registrar in writing. Once filed, this notification becomes a permanent part of the student's record until the student instructs the College, in writing, to remove it.
 5. **The right to file a complaint with the U.S. Department of Education concerning alleged failures by Colleges to comply with the requirements of FERPA.** The name and address of the office that administers FERPA is:

**Family Policy Compliance Office
U.S. Department of Education
400 Maryland Avenue, SW
Washington, DC 20202-4605**

Directory Information

The Board of Trustees has designated the following as directory information: student names and addresses, dates of attendance, full vs. part-time student status, awards and 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.

Colleges 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 above.

GRADE REPORTS

Semester grades will be available via the web approximately one week after the exam period. To view your grades online go to <http://my.comnet.edu>. Students unable to access the web may request a grade report. This request must be in writing and must include your student ID number and/or social security number. Forms are available in the Registrar's Office, K516.

FINANCIAL AID INFORMATION

TRANSCRIPTS

Official transcripts are free of charge. Official transcript requests as well as unofficial transcripts can be accessed through self-serve also at <http://my.comnet.edu>. Transcript requests must be in writing and should include your name, maiden name if applicable, address, phone number, social security number, birth date, student identification number, dates of attendance, the complete address of where you want your transcript sent and your signature. Mail or fax your request to the attention of the Office of the Registrar at the College's address. The fax number is (203) 575-8085.

ENROLLMENT VERIFICATION REQUESTS

Enrollment Verifications are available approximately three weeks after the start of each semester. Enrollment Verifications are supplied through the National Student Clearinghouse. Students can print their own Enrollment Verification Certificate via the internet. By using their 8-digit student ID number and PIN, students can log onto <http://my.comnet.edu>, follow the prompts from Student Services and Financial Aid to Student Records. They will connect directly to the National Clearinghouse. Enrollment verifications are available approximately three weeks after the start of each semester.

DUPLICATE NON-CREDIT CERTIFICATES

Official non-credit transcripts are not available. Naugatuck Valley Community College issues initial non-credit certificates at no cost to you upon successful completion of all your program requirements. You are responsible for the safekeeping of this certificate. A duplicate or replacement certificate may be obtained for a processing fee of \$15. To comply with FERPA laws, all requests must be in writing and signed by the student to whom the certificate was issued. The following information must be included:

- Full name
- Name at the time of the course
- Current mailing address
- Current phone number
- Student ID or Social Security number
- Course or program name
- Semester and year course or program was completed
- Signature (original, not electronic) and current date

This process requires verification of successful program completion and may take up to three weeks. Mail the requests to:

- Naugatuck Valley Community College
- Kinney Hall, Room K406
- Attention: Duplicate Certificate Request
- 750 Chase Parkway, Waterbury, CT 06708

FINANCIAL AID POLICIES

Financial aid is monetary assistance provided to undergraduate students who seek higher education. The cost of education beyond high school is expected to be paid by the student and/or the student's family. When the cost, however, is greater than the student's or the family's ability to pay, financial assistance is available. Most assistance programs are administered on the basis of "need" which is defined as the difference between the cost of attending a particular college and the family's ability to pay that cost. Cost includes tuition and fees, books and supplies, transportation, and miscellaneous expenses. The student's or the family's ability to pay is calculated through a needs analysis system approved by the United States Department of Education, Office of Student Financial Assistance.

The Financial Aid Office incorporates various types of financial aid into a "Financial Aid Package" for each student in an effort to help the student meet particular educational goals. If qualified, Naugatuck Valley Community College students can receive

financial assistance for direct educational costs such as tuition, fees, books and supplies. Student status will be measured as follows:

- | | |
|------------------------|-----------|
| • 6-8 credits | 1/2 time |
| • 9-11 credits | 3/4 time |
| • 12 credits and above | Full-time |

Financial Aid Awards shall be prorated based on student status as recorded by the Record's Office at the time a payment list is generated. If an overpayment has been made, the aid dollars shall be replaced in the appropriate accounts. The order is as follows:

- self-help dollars will be restored to accounts.
- student help and college work study dollars will be returned to appropriate accounts.
- loan dollars will be returned to the College account, or to the federal government if a Direct Subsidized Stafford Loan, Direct Unsubsidized Stafford Loan, or Direct Plus Loan for Undergraduate Students is involved.

The cost of attending Naugatuck Valley Community College will vary depending on a number of factors: how many courses the student is taking, how far away and with whom the student lives, and whether the student has dependent or independent status. The expenses listed below are typical for a broad category of students attending Naugatuck Valley:

ANNUAL BUDGET

Tuition	\$4,208
Fees	\$,488
Books	\$1,200
Transportation and Miscellaneous Expenses	\$4,330
Total	\$9,602

Note: The budget is pro-rated for less than full-time students. (Costs subject to change.)

Eligibility for Financial Assistance

Common to all federal funding, to be eligible for financial assistance a student at the College must:

- be a United States citizen or an eligible non-citizen.
- have financial need as assessed by an eligible needs analysis system.
- be enrolled as a matriculated student at Naugatuck Valley Community College.
- be working towards a degree or certificate.
- maintain satisfactory academic progress.
- not be in default on any federal educational loan or owe a repayment on any federal grant at any institution.
- certify registration for Military Selective Service (if applicable).
- have completed high school or have earned the GED.
- be in good standing with any federal educational loans.
- Non-credit course work does not qualify for federal financial aid.

HOW TO APPLY FOR FINANCIAL AID

A student may apply for financial assistance at Naugatuck Valley Community College by completing the Free Application for Federal Student Aid (FAFSA) form for the year in which the student intends to attend the College. This form will establish the "financial need" of the student. Financial aid is granted on a one (1) year basis; students must apply for assistance each year.

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The student and a parent must apply for a FSA ID at FSAID.ed.gov. The FSA ID is required for use in signing the on-line application.

The student should complete the FAFSA on the web at FAID.ed.gov. The Federal School Code for Naugatuck Valley Community College is 006982.

Using Your Tax Return:

If you (or your parents) need to file a tax return with the Internal Revenue Service (IRS), we recommend that you complete your tax returns before filling out the FAFSA. If you have not completed your tax return yet, you can submit your FAFSA using estimated tax information, and then correct that information after you file your tax return. The easiest way to complete or correct your FAFSA with accurate tax information is by using the IRS Data Retrieval Tool through www.fafsa.gov. In a few simple steps, you may be able to view your tax return and transfer it directly into your FAFSA.

If a student is selected for verification, processing time can take up to four (4) weeks. Students are encouraged to provide all required verification documents in a timely manner to the Naugatuck Valley Community College Financial Aid Office. During the verification process if a student wishes to register for classes, payment arrangements must be made with the Bursar's Office to avoid cancellation of classes.

TYPES OF FINANCIAL AID

Once eligibility has been established, the student should visit www.nv.edu and login on MyCommnet Banner Self Service and click on the financial aid tab. This will explain the "Financial Aid Package" comprised of all the funds the student will receive. The student may receive aid from one or many programs depending upon the student's need and the availability of funds. The available programs include:

Grants

These are gift aid programs. Funds are not required to be repaid.

- **Federal Pell Grant** This grant is the foundation of all federal aid programs. It is money provided to help undergraduate students pay for their education beyond high school. The amount of money the student can receive through this program will depend upon the program funding for the year, the information the student provides on the application, and whether the student is enrolled full-time or part-time. The student must be enrolled for at least three credit hours in a program of six months in length or longer. The student is eligible for this grant until a first bachelor's degree is earned.
- **Federal Supplemental Educational Opportunity Grant (SEOG)** This is a federal grant for undergraduate students who have completed high school and have a financial need.
- **Naugatuck Valley Grant** This program provides grants in varying amounts to students demonstrating financial need. Eligibility requires that a student be a Connecticut resident.

Loans These funds must be repaid and **approval of these loans is not automatic.**

- **Federal Direct Stafford Loan Program** This program provides low interest loans to students seeking assistance in financing their education. The loans are administered through the Federal government. The interest rate is variable and may change every July 1, but many never exceed 8.25%. These loans are available to students who are enrolled at least half-time and maintain satisfactory academic progress. The loan must be used for reasonable educational expenses.
- There are two types of loans. A **subsidized Stafford Loan** is awarded on the basis of financial need. You will not be charged interest before you go into repayment or during authorized

deferment periods. An **unsubsidized Stafford Loan** is not awarded on the basis of need. You will be charged interest from the time the loan is disbursed until it is paid in full.

- The maximum grace period before payment becomes due is six months after graduation or withdrawal from school.
- **Federal Direct Plus Loans** Federal Plus Loans are for parents to borrow. This type of loan enables parents with a good credit history to borrow to pay for the education expenses for each of their dependent undergraduate children who are enrolled at least half-time and maintain good academic satisfactory progress.
- **Federal Work-Study Program**
 - The Federal College Work-Study Program (FWS) is part of the "Financial Aid Package" which provides jobs for undergraduate students who need help earning funds for some of their educational expenses. Awards vary according to financial need and the availability of funds. Generally, a student will work 7 to 15 hours weekly at the prevailing rate. Students must be enrolled at least part-time (six credits) and be making satisfactory academic progress.

ACADEMIC STANDARDS FOR FINANCIAL AID RECIPIENTS

Satisfactory Academic Progress Policy for Student Financial Aid Recipients

A student receiving Federal Title IV financial aid or other financial aid directly administered or certified by the college must maintain satisfactory academic progress towards the completion of a certificate or degree program of study. Satisfactory academic progress for financial aid recipients is measured by both quantitative and qualitative standards and is an assessment of a student's cumulative academic record at the college. A student must complete successfully two-thirds (66.66%) of the credits (earned credits/attempted credits) s/he attempts. All attempted credits resulting in either an academic grade or administrative transcript notation will be included in the quantitative calculation. Incomplete courses, course withdrawals, course repetitions, and noncredit remedial courses (with appropriate credit equivalency evaluation) will be included in this assessment. Transfer credits will be counted as attempted and earned credits in the calculation for determining satisfactory academic progress. A student must also maintain a cumulative minimum grade point average as noted below to be making satisfactory academic progress and be eligible to receive financial aid.

Earned Credits Minimum GPA

≤ 15.99	1.50
≥ 16.00	2.00

Financial Aid Warning Period

A student's cumulative academic history will be evaluated prior to each term's financial aid disbursement. This policy will be used to evaluate full-time and part-time students.

1. **Repeated/Audit Coursework:** Financial aid recipients are limited to one repetition of a previously passed course in their program of study. A second repetition of a previously passed course will not be eligible for financial aid payment. Audit courses are not financial aid eligible.
2. **Communication:** Students will receive notification prior to the start of a period of enrollment via postal mail or e-mail that will describe any changes to the status of their academic status. Updates to academic progress standing are also available to student at www.mycommnet.edu.
3. **Warning Period:** Any student who fails to meet the minimum satisfactory academic progress standard will be placed on Financial Aid Warning once. The warning period will be the student's next semester of enrollment at the college. The

FINANCIAL AID INFORMATION

college will communicate the Warning status to the student and inform the student that s/he must meet the academic progress standard by the end of the Warning Period in order to maintain eligibility to participate in the financial aid program at the college.

Termination

Any student who fails to meet the minimum satisfactory academic progress standard at the end of the warning period will be dismissed from the financial aid program at the college. The College will communicate the termination status to the student and inform the student of the reinstatement and appeal process available to the student.

Maximum Credit Hours

A student may receive student financial aid for any attempted credits in his/her program of study that do 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 must be included in the calculation. This 150% maximum credit hours rule is applicable to students who change majors or who pursue a double major.

Reinstatement

A student's financial aid eligibility will be automatically reinstated at such time as the student meets the minimum satisfactory academic requirements. Reinstatement to the financial aid program may also occur upon successful appeal by the student.

Appeal Process

Students may appeal financial aid decisions. The first appeal should be made to the Director of Financial Aid. Appeal forms are available online and at the Financial Aid Office. Any appeal, due to extenuating circumstances (such as injury, illness, death of a relative, or if a student has experienced undue hardship as a result of special circumstances) must be documented with supporting evidence from a third-party source. Students will be notified of the director's decision within 14 days. If the student is dissatisfied with the decision on that level, an appeal can be made to the Dean of Student Services.

Withdrawal From Classes

Students who plan to withdraw from any classes must report to the Financial Aid Office prior to the actual course withdrawal for counseling and/or adjustment to their award. Students who do not follow this procedure may be placed on warning or terminated from financial aid depending upon completion of the rest of their courses and the grades earned for those courses.

FINANCIAL AID – SUMMER SESSION

There are Pell Grants available for those who qualify for the summer session. Satisfactory academic progress requirements are identical to semester requirements. For further information, please call the Financial Aid Office.

FEDERAL TAX CREDITS FOR EDUCATIONAL EXPENSES

The Taxpayer Relief Act of 1997 created two nonrefundable education tax credits entitled the **Hope Scholarship Credit** and the **Lifetime Learning Credit**. See details on page 20.

RIGHTS AND RESPONSIBILITIES OF STUDENTS RECEIVING FINANCIAL AID

You have the right to ask the College:

- The names of its accrediting organizations.
- About its programs and faculty; its instructional, laboratory, and other physical facilities.
- What is the cost of attending; what are the policies regarding

refunds to students who withdraw.

- What financial assistance is available, including information on all federal, state, local, private, and institutional financial aid programs.
- What the procedures and deadlines are for submitting applications for each available financial aid program.
- What criteria is used to select financial aid recipients.
- How financial need is determined. This process includes how costs for tuition and fees, room and board, travel, books and supplies, personal and miscellaneous expenses, etc. are considered in a student's budget. It also includes what resources (such as parental contribution, other financial aid, assets, etc.) are considered in the calculation of financial need.
- How much financial need, as determined by the institution, has been met.
- How and when will financial aid be distributed.
- An explanation of each type and amount of assistance in the financial aid package.
- What the interest rate is for a student loan, the total amount that must be repaid, the length of time for repayment, the date to begin repayment, and any cancellation and deferment provisions that apply.
- Those involved in the College's Work Study Program have the right to know the type of jobs available, hours of work, duties, rate of pay, and payment schedule.
- For a reconsideration of the aid package if you believe a mistake has been made or if your enrollment or financial circumstances have changed.
- For an explanation regarding the criteria used to determine satisfactory progress.
- What special facilities and services are available to students with disabilities.

It is your responsibility to:

- Review and consider all information about the College's programs before enrollment.
- Pay special attention to your application for student financial aid, complete it accurately, and submit it on time to the proper office. Errors can prevent or delay the receipt of financial aid.
- Provide all additional documentation, verification, corrections and/or new information requested by either the Financial Aid Office or the agency to which you submitted your application.
- Read and understand all forms that you are asked to sign, and retain a file copy.
- Accept responsibility for the promissory note and all other agreements that you sign. If you have a loan, notify the Department of Education of changes in your name, address or school status.
- Perform in a satisfactory manner the work that is agreed upon in accepting a college work-study job.
- Know and comply with the deadlines for application or reapplication for aid.
- Know and comply with the College's refund procedures.

PAYMENT OF TUITION AND FEES

Payments of tuition, the college services fee, the student activities fee and applicable mandatory usage fees are expected in accordance with deadlines published in the credit and non-credit tabloids each semester. Special fees and charges must be paid as designated by the College.

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All holders of temporary visas (e.g. F, B, J, and H) will be charged the out-of-state tuition rate, unless and until they present evidence of change to permanent resident which may be demonstrated by presentation of the "Notification of Action" form from U.S. Citizenship and Immigration Services verifying the student's change of status, or the actual "green card" as well as evidence that establishes Connecticut residency in accordance with state law.

Failure to Pay

The College reserves the right to cancel student registrations for non-payment, but students are responsible for the applicable charges should they fail to formally drop the class(es) from their schedule or withdraw from the College. The College also reserves the right to freeze the records of any students with incomplete payment plans or other obligations to the College.

Students presenting bad checks must replace them (plus \$25.00) with cash, money order or bank check within seven (7) days (one week) of the College's receipt of such notification.

The applicable charges are subject to change but are expected to be as shown below and on the following pages. Charges for non-credit courses are variable by course.

Installment Payment Plan

An installment payment plan is available to students enrolling for 3 credits or more in the fall and/or spring semesters and select non-credit programs. This plan allows students to defer the payment of tuition beyond the normal due dates, for a fee of \$25.00 each semester. Specific information is available in the Bursar's Office, Kinney Hall.

Special Fees

These include:

1. An application fee charged to all first-time applicants for admission and first-time non-matriculating students at any Connecticut Community College.....\$20.00
2. A program enrollment fee charged to all students applying for matriculation into an academic program except if an application fee has been paid.....\$20.00
3. Late payment fee charged for any tuition and fee payment received after the established date\$15.00
4. Replacement of a lost library/ID card fee is charged to defray the cost of replacing a student's ID card\$10.00
5. Returned check fee charged for any checks which are not honored by a banking institution.....\$25.00
6. College Level Examination Program (CLEP) \$15.00
(In addition there is a \$80 fee payable to The College Board)
Proctoring fee\$15.00 for CCC students; \$35 for non-CCC students
7. Academic evaluation fee charged to students taking college-produced examinations for the awarding of course credit\$15.00
8. Portfolio assessment fee\$100.00
9. TV course fees charged for the support of promotional and other expenses\$0
10. Proctoring fee\$35.00

Students enrolled in tuition fund courses and/or educational extension fund credit courses carrying 12 semester hours or more will be classified as full-time for general fee purposes.

WAIVER OF FEES

Fees may be waived under the following conditions:

- Application fee waiver for students with severe financial need.
- Fee waivers for special programs for students rendered incapable of paying the fees or benefiting from the services.
- Fee waivers for students taking TV courses only and who will not use the College facilities.

WAIVERS OF TUITION

Tuition waivers apply to general fund courses only unless otherwise noted.

Dependent Children of Certain Police/Firefighters

Tuition is waived for any dependent child of a police officer, as defined in section 7-294a of the CT General Statutes, or a supernumerary or auxiliary police officer, or firefighter, as defined in section 7-323j, killed in the line of duty.

Persons 62 Years or Older

The application fee and all general fees are waived for any Connecticut resident 62 years of age or older who has been accepted for admission. Tuition is waived for Connecticut residents 62 years of age or over on a space available basis. Special fees other than the application fee must still be paid. Registration under this waiver begins on the first day of the semester and is restricted to classes with available seats.

VETERAN'S AND NATIONAL GUARD BENEFITS

The Veteran's Administration provides educational benefits under the following programs:

- Chapter 30: The Montgomery G.I. Bill
- Chapter 31: Vocational Rehabilitation
- Chapter 32: Post Vietnam Veterans Educational Assistance Program (VEAP)
- Chapter 33: Post 9/11 G.I. Bill
- Chapter 35: Survivors' and Dependents' Education
- Chapter 1606: Selected Reserve Program
- Chapter 1607: Reserve Educational Assistance Program (REAP)

Students are advised to make their initial application for VA benefits well in advance of their first semester. Veterans may use their GI Bill benefits during spring, summer and fall semesters.

Eligible students may use VA benefits to pursue a degree or certificate program approved by the CT State Approving Agency and must be enrolled in that program. Once a student has registered and paid the appropriate charges for a given semester, the College will certify the student's enrollment to the VA, which will then pay the appropriate benefits to the student.

Continued certification by the College is contingent on the student's maintaining satisfactory academic progress toward the completion of program requirements.

Further information on VA benefits available in the Veteran's Affairs Office located within the Financial Aid Office in K512.

Connecticut Veteran's Tuition Waiver

Under Section 27-103 of the CT General Statutes, the Board of Trustees for the State of Connecticut Community Colleges shall waive the tuition at any community college for eligible CT veterans with military service during time of war. For the purpose of granting a tuition waiver, a veteran is anyone who has served at least 90 days of active duty and has been released from active duty honorably or under honorable conditions.

To use the waiver, a veteran should complete the application in the Veteran's Affairs Office in K512, present a CT driver's license and Member 4 copy of the DD-214. Additional information will be provided at that time. The CT Veteran's Tuition Waiver can not be used for summer classes, winter sessions, or late start programs and does not cover fees or book charges.

National Guard Tuition Waiver

Members of the Connecticut Army and Air National Guard who are in good standing are eligible for a tuition waiver. The waiver can be used during spring and fall semesters only and does not cover fees or book charges.

Guard members must apply for a Certificate of Eligibility from their unit. Members are encouraged to apply early to their unit for the semester they wish to attend. The Certificate of Eligibility is good

TUITION AND FEES

for one semester only. All guard members must be prepared to make payment arrangements at time of registration if no Certificate of Eligibility is on file with the Veteran's Affairs Office.

Veterans OASIS

The Veterans OASIS is located in S411 and is open Monday through Friday, 7 am - 10 pm; Saturdays, 7 am - 6 pm; and Sundays, 11 am - 6 pm. The Oasis is open to all veterans (all guests must be accompanied by an NVCC veteran student). The Oasis provides a quiet area for networking, homework, and veteran related activities. There are computers and wireless internet available also. For further information, please contact Debbie DiCicco in K512.

Dependent Child or Surviving Spouse of Specified Terrorist Victim

Tuition for General Fund courses are waived for any Connecticut resident who is a dependent child or surviving spouse of a specified terrorist victim who was a resident of Connecticut. A list of said victims is maintained by the State Department of Higher Education.

Dependent Children of Veterans

Dependent children of veterans missing in action or former prisoners of war will have a complete waiver of tuition.

FEDERAL TAX CREDITS FOR EDUCATIONAL EXPENSES

The Taxpayer Relief Act of 1997 created two non-refundable education tax credits entitled the **Hope Scholarship Credit** and the **Lifetime Learning Credit**. A nonrefundable tax credit allows a taxpayer to subtract from the total amount of taxes owed, the value of the credit that he/she is eligible for. "Nonrefundable" means that you must owe taxes to get the value of the credit (i.e. if you owe \$500 in taxes and are eligible for a \$1,000 tax credit, you can subtract \$500 from the taxes owed).

Hope Scholarship Credit is a non-refundable tax credit that can be claimed for 100 percent of the first \$1,000 of out-of-pocket expenses for each student's qualified tuition and related expenses, plus 50 percent of the next \$1,000. For example, the maximum is a \$1,500 tax credit for each student (\$2,000 in out-of-pocket expenses).

Credits can also be claimed for other students in the family (a dependent or spouse) who qualify (i.e., a parent goes to school and claims the credit for himself/herself and a child who is a dependent that is also attending a school). The credit is based on a per student basis. As long as the student is eligible, there is no limit on the dollar amount a particular family can be eligible.

Lifetime Learning Credit is a non-refundable tax credit that can be claimed for 20 percent of the first \$5,000 of out-of-pocket expenses for a family's qualified tuition and related expenses. For example, the maximum is a \$1,000 tax credit for the entire family. In the year 2003, the amount increases to 20 percent of the first \$10,000 (\$2,000).

Credits can be claimed for more than one person in the family but not to exceed \$1,000 for the entire family (\$2,000 in 2003). This is different than the Hope Scholarship Credit; the amount is based on a per family basis rather than a per student basis. There is a dollar limit that a family can be eligible.

You must meet specific income and enrollment guidelines to be eligible. Consult the Taxpayer Relief Act of 1997 or the Internal Revenue Service for details.

WITHDRAWALS AND REFUNDS

A registered student wishing to withdraw must submit a withdrawal request, in writing, to the Office of the Registrar. The effective date of withdrawal is the date the signed withdrawal is received.

Withdrawals can be made:

- in person at the Office of the Registrar K516
- by mail: NVCC Office of the Registrar K516
- 750 Chase Parkway, Waterbury, CT 06708

- Fax: (203) 575-8085
- On-line: <http://mycommnet.edu>

Requests must be received by the deadline within the withdrawal period (i.e. requests received by midnight prior to the deadline will be honored).

Refunds of Tuition and Fees

• Non-refundable Fees

• The **college services fee** and **student activity fee** paid by all students registering for credit general fund/tuition account courses, or credit extension account courses, are non-refundable, except when course sections cancelled by the College would result in a change in fees otherwise due.

• Also, the following usage fees and special fees are non-refundable:

- clinical program fee
- application fee/program enrollment fee
- late registration fee
- replacement of lost ID card fee
- academic evaluation fee
- portfolio assessment fee
- lab/studio fees
- proctoring fee

• Refund of Tuition for General Fund Credit Courses

• For notice of withdrawal received prior to the first day of college classes for that semester, a refund of 100 percent of total **tuition and lab/studio fees** will be granted for both full-time and part-time students.

• For notice of withdrawal received on the first day of classes and through the 14th calendar day of that semester, both full-time and part-time students will be granted a 50 percent refund of total **tuition and lab/studio fees** applicable to the courses for which they are registered.

• For a reduction in load which occurs on the first day of classes and through the 14th calendar day of that semester, 50 percent of the difference of the **tuition and lab/studio fees** applicable to the original and revised course schedule will be refunded.

Note: No refund of tuition will be granted for either full-time or part-time students beyond the 14th calendar day of classes.

• Refund Schedule for Students Enrolling in the Armed Services

• Upon submitting notice in writing of withdrawal accompanied by a certified copy of enlistment papers, 100 percent refund of tuition and fees will be granted to students entering the armed services before earning degree credit in any semester.

• Change of Registration

• When a student has changed his or her course schedule to a different mix of general and extension credit courses, the College may elect not to apply the refund policy which would otherwise be in effect with respect to the course(s) deleted, and may, instead, collect or refund only the net amount due based on the tuition and fee policies applicable to the total student course load.

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- **Refund of Fees for Extension Fund Credit Courses**

- Extension fees may be refunded in accordance with the following:
- A student who withdraws by the last business day before the first class meeting of the course(s) is entitled to a full refund of all extension account **fees**. A request for withdrawal must be received by the president or his or her designee no later than the end of the last regular business day of the college before the first meeting of the course(s).
- A student reducing his or her extension account course load will be entitled to a full refund of extension account **fees** appropriate to the course(s) dropped, provided the request for refund is received by the president or his or her designee no later than the end of the last regular business day of the college before the first class meeting of the course(s).
- **No refund will be made after the first class meeting of the course except in cases of serious illness or other extraordinary circumstances, at the discretion of the college president or his or her designee.**
- If a class is cancelled, a full refund of all course fees will be made.

- **Other – Special Waivers**

- The College president is authorized to modify the tuition refund policy for specific students on a case-by-case basis under the following circumstances: severe illness documented by a doctor's certificate; erroneous advisement by the College; and military transfer. Exceptions which are not normally considered include change in job, normal illness, and poor decision or change in mind by a student. Other extenuating or extraordinary circumstances may also be considered upon written request submitted to the president or his/her designee.

- **Refund Policy for Students Participating in Federal Title IV Student Aid Programs**

- Students who receive federal student aid and withdraw from all classes are subject to the Return of Federal Title IV Funds calculation. This calculation allows you to keep only that portion of federal aid which you earned, based upon the number of calendar days you were in attendance, compared to the number of calendar days in the entire semester.
- (Example: A student received \$1200 in Federal Grants, but withdrew after 40% of the semester. He is said to have "earned" 40% of the grants or \$480.00. The remainder of the Grants, or \$720.00 is said to be "unearned.")
- Any balance remaining after this calculation will be your responsibility to pay back to NVCC. Should you fail to complete payment, you will be referred to the U.S. Department of Education for collection and will no longer be eligible for Title IV funds at any institution.

- **Non-credit Refund Information**

- Withdrawal requests for refund must be received in writing three business days prior to the beginning of class unless otherwise stated in the course description. Refunds are not granted after this deadline.

Address for refund requests:

Attn: Non-Credit Refunds
Naugatuck Valley Community College
Office of Lifelong Learning Registration, Rm. K407
750 Chase Parkway, Waterbury, CT 06708
or e-mail: continuinged@nv.edu

If there is a course cancellation due to insufficient enrollment, students will be notified by phone and/or letter. Please make sure when registering that your contact information is up-to-date. We would like to offer you the opportunity to transfer to another section, if available, or to another class of your choosing. If we have not heard from you within 7 business days, a refund will automatically be processed. Please allow 2-4 weeks for processing. The person registered in our records system is the person who will receive the refund. When registering for a coupon course, cancellation of one class voids the discounted price.

TUITION and FEE SCHEDULE

*Approved by the Board of Regents
Effective Fall 2016*

**Subject to change without notice.
Visit nv.edu/pay for current tuition and fee schedule.**

In-State Resident Students					Out-of-State Non-Resident Students				
Semester Hours	Tuition	College Services Fee	Student Activity Fee	Total	Semester Hours	Tuition	College Services Fee	Student Activity Fee	Total
1	\$155.00	\$77.00	\$15.00	\$247.00	1	\$465.00	\$231.00	\$15.00	\$711.00
2	\$310.00	\$84.00	\$15.00	\$409.00	2	\$930.00	\$252.00	\$15.00	\$1,197.00
3	\$465.00	\$90.00	\$15.00	\$570.00	3	\$1,395.00	\$270.00	\$15.00	\$1,680.00
4	\$620.00	\$95.00	\$15.00	\$730.00	4	\$1,860.00	\$285.00	\$15.00	\$2,160.00
5	\$775.00	\$112.00	\$15.00	\$902.00	5	\$2,325.00	\$336.00	\$15.00	\$2,676.00
6	\$930.00	\$128.00	\$15.00	\$1,073.00	6	\$2,790.00	\$384.00	\$15.00	\$3,189.00
7	\$1,085.00	\$144.00	\$15.00	\$1,244.00	7	\$3,255.00	\$432.00	\$15.00	\$3,702.00
8	\$1,240.00	\$159.00	\$15.00	\$1,414.00	8	\$3,720.00	\$477.00	\$15.00	\$4,212.00
9	\$1,395.00	\$176.00	\$15.00	\$1,586.00	9	\$4,185.00	\$528.00	\$15.00	\$4,728.00
10	\$1,550.00	\$190.00	\$15.00	\$1,755.00	10	\$4,650.00	\$570.00	\$15.00	\$5,235.00
11	\$1,705.00	\$208.00	\$15.00	\$1,928.00	11	\$5,115.00	\$624.00	\$15.00	\$5,754.00
12.0 or more**	\$1,860.00	\$224.00	\$20.00	\$2,104.00	12.0 or more**	\$5,580.00	\$672.00	\$20.00	\$6,272.00
Annual Full-time	\$3,720.00	\$448.00	\$40.00	\$4,208.00	Annual Full-time	\$11,160.00	\$1,344.00	\$40.00	\$12,544.00

New England Regional Program (NEBHE)					Educational Extension Program Credit Courses				
Semester Hours	Tuition	College Services Fee	Student Activity Fee	Total	Semester Hours	Educational Extension Fee	College Services Fee	Student Activity Fee	Total
1	\$232.50	\$115.50	\$15.00	\$363.00	1	\$168.00	\$77.00	\$15.00	\$260.00
2	\$465.00	\$126.00	\$15.00	\$606.00	2	\$336.00	\$84.00	\$15.00	\$435.00
3	\$697.50	\$135.00	\$15.00	\$847.50	3	\$504.00	\$90.00	\$15.00	\$609.00
4	\$930.00	\$142.50	\$15.00	\$1,087.50	4	\$672.00	\$95.00	\$15.00	\$782.00
5	\$1,162.50	\$168.00	\$15.00	\$1,345.50	5	\$840.00	\$112.00	\$15.00	\$967.00
6	\$1,395.00	\$192.00	\$15.00	\$1,602.00	6	\$1,008.00	\$128.00	\$15.00	\$1,151.00
7	\$1,627.50	\$216.00	\$15.00	\$1,858.50	7	\$1,176.00	\$144.00	\$15.00	\$1,335.00
8	\$1,860.00	\$238.50	\$15.00	\$2,113.50	8	\$1,344.00	\$159.00	\$15.00	\$1,518.00
9	\$2,092.50	\$264.00	\$15.00	\$2,371.50	9	\$1,512.00	\$176.00	\$15.00	\$1,703.00
10	\$2,325.00	\$285.00	\$15.00	\$2,625.00	10	\$1,680.00	\$190.00	\$15.00	\$1,885.00
11	\$2,557.50	\$312.00	\$15.00	\$2,884.50	11	\$1,848.00	\$208.00	\$15.00	\$2,071.00
12.0 or more**	\$2,790.00	\$336.00	\$20.00	\$3,146.00	12	\$2,016.00	\$224.00	\$20.00	\$2,260.00
Annual Full-time	\$5,580.00	\$672.00	\$40.00	\$6,292.00	13	\$2,184.00	\$224.00	\$20.00	\$2,428.00
					14	\$2,352.00	\$224.00	\$20.00	\$2,596.00
					15	\$2,520.00	\$224.00	\$20.00	\$2,764.00

**Excess Credits Tuition Charge: An additional flat tuition charge of \$100 per semester shall apply when total registered credits exceed 17 for the semester.

Mandatory Usage Fees, rates effective Fall 2016:

Laboratory Course Fee	\$91.00	Per registration in a designated laboratory course
Studio Course Fee	\$97.00	Per registration in a designated studio course
Clinical Program Fee-Level 1	\$312.00	Per semester (Fall and Spring only) - Level 1 allied health programs
Clinical Program Fee-Level 2	\$223.00	Per semester (Fall and Spring only) - Level 2 allied health programs

All Tuition and Fees are subject to change

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CENTER FOR JOB PLACEMENT AND COLLEGE OPPORTUNITIES (CJPCO)

Traurig Learning Resources Center & Library, Room L524

Phone: (203) 575-8158 • Fax: (203) 596-8794

nv.edu/cjpcowaterbury:

Monday - Friday, 8:30 a.m. to 4:30 p.m.

Evening hours by appointment only.

Danbury

Administrative Offices

Visit the calendar for days and times at nv.edu/jpc

The Center for Job Placement and College Opportunities' (CJPCO) services include career planning, employer connections, cooperative education, internships, student workers and student assistants. Learn to conduct a job search, use Internet services effectively in all phases of career planning, including finding a career that suits your strengths and personality type, as well as the hiring outlook, salary information and educational requirements of careers of interest to you. Learn to write effective resumes and cover letters, interview effectively and connect with employers who are actively hiring employees or interns. Sign up for our online job posting board at

www.collegecentral.com/nvcc to view part-time, full-time, internship and work study job postings and to post your resumé.

All CJPCO services are open to alumni as well as to current students.

WORKFORCE TRANSITION SERVICES

W.I.A. Programs The federal Workforce Investment Act (W.I.A.) offers a comprehensive range of workforce development activities through statewide and local organizations. Naugatuck Valley Community College is a partner with the Northwest Regional Workforce Investment Board. NVCC offers programs that are certified to provide education and training to adults and dislocated workers who have been awarded vouchers under W.I.A., these may include:

- Job Seekers
- Laid-off Workers
- Youth
- Incumbent Workers
- New Entrants to the Workforce
- Veterans
- Persons with Disabilities
- Employers

For more information, or to learn if you qualify, contact your local Department of Labor at www.CTDOL.state.ct.us. Once qualified by the D.O.L. students should schedule an appointment to determine an educational plan. Contact:

Lucretia Sveda, Director of Workforce and Transition

190 Main Street, Danbury, CT 06810

Tel. (203) 797-9361

or

750 Chase Parkway, Room L524

Waterbury, CT 06708

Tel. (203) 575-8221

lsveda@nv.edu

CENTER FOR ACADEMIC PLANNING AND STUDENT SUCCESS (CAPSS)

Kinney Hall Room K520

Phone: 203-575-8025

Fax: 203-596-8610

Email: CAPSS@nv.edu

The counselors and advisors in the CAPSS assist students with a variety of career, academic advising, transfer and personal concerns. Appointments may be made in person, by phone or email at the contact information above. Services are also available at the Danbury Campus: Second Floor, Administrative Offices.

• **NEW** students to the college who want to know about admissions and program requirements should contact the Admissions Office at (203) 575-8040.

• **CONTINUING** students to the college should contact their faculty advisor: A list of advisors can be found in the CAPSS office or by logging into www.my.Commnet.edu.

• **Academic Advising** Academic advising is offered to assist students in recognizing the options that are available for their educational planning, to illustrate the need to plan ahead, to learn the language of educational planning, learn the optimal sequence of courses, identify academic requirements and electives, educational decision making, and develop an overall educational plan.

• **Testing Center** Listed below are the tests offered and administered in the Testing Center. Students may elect to have prior learning evaluated by the following examination options:

➤ **College Level Examination Program (CLEP)** allows individuals to earn college credit for what they already know. NVCC awards credit for successful scores on CLEP exams. CLEP tests may be taken at Naugatuck Valley through the Testing Center.

➤ **Credit by Examination** - Some divisions and departments of the College produce their own examinations for credit. Contact your advisor or the Testing Center for more information.

• **Test of Academic Skills (TEAS)** Students applying to the Nursing or Physical Therapist Assistant programs are required to take the TEAS test.

• **Accuplacer (Placement Test)** Incoming students enrolled in a degree or certificate program are required to take the placement test to assess academic skills in mathematics, English and reading.

• **Career Counseling** Career counseling is an educational and developmental process that is dedicated to student self-realization and self-direction, and assists students in developing skills in career decision making. In collaboration with the CJPCO, CAPSS offers several career planning opportunities including individual career counseling appointments and limited personal interest inventories.

• **Personal Counseling** Counseling within the CAPSS office takes a holistic approach to student success. Short term counseling services are provided by professionally trained counselors for personal concerns. Some concerns for personal counseling include but are not limited to; academic issues and dilemmas, making life decisions, developing self-confidence, managing stress, and alleviating personal barriers to success in college. Referrals to outside agencies are made as needed.

• **Transfer Planning** Students planning to transfer upon graduation to other colleges or universities should meet with their academic advisor or see a counselor early in their academic studies. Credits that are transferable and applicable vary from college to college, so it is critical that students learn about the college of their choice and the transfer process for that college. CAPSS hosts semiannual Transfer Fairs for students in which area colleges and universities are represented.

STUDENT SERVICES AND PROGRAMS

TRANSFER INFORMATION

Counselors and/or advisors provide assistance for students who plan to transfer into a four-year college or university. Information is available in CAPSS on the transfer of credits, scholarships, financial aid and admission requirements for both in-state and out-of-state colleges and universities. Students should consult with their receiving institutions to confirm that courses will transfer.

Transfer to the Connecticut State Universities (CSU's)

Graduates of the Connecticut Community Colleges with a GPA of 2.0 or higher are guaranteed admission to the state university of their choice within the Connecticut State College and University System. Students must adhere to the application deadlines. See the Center for Academic Planning and Student Success (CAPSS) for details.

Special Transfer Compacts - Dual Admissions Programs (DAP) have been established between each of the universities in the Connecticut State College and University System and Naugatuck Valley Community College. Students who have earned 15 or fewer transferable college credits at the community college at the time of application may apply through CAPSS and follow designated transfer programs.

Transfer to the University of Connecticut

The University of Connecticut (UCONN) offers the Guaranteed Admission Program (GAP), an agreement between the University and the Connecticut Community Colleges. Naugatuck Valley students may apply if they:

- Complete an application through the Center for Academic Planning and Student Success (CAPSS) prior to completion of **30** transferrable credits
- Limit to majors offered in UCONN's College of Liberal Arts and Sciences and College of Agriculture and Natural Resources
- Complete a prescribed articulation program at NVCC
- Earn a minimum 3.0 GPA upon graduation from NVCC
- Observe the application procedures and deadlines within the agreement

Other articulations currently exist for programs at UCONN's Waterbury Campus:

- Business and Technology
- Urban and Community Studies
- Bachelors of General Studies

NVCC students are free to apply for transfer to any of UCONN's many colleges and programs at any time. Many of these programs are very competitive. It is important that the student consult with their faculty advisor or the CAPSS for advisement.

NVCC also has various transfer articulation agreements with the following colleges and universities located in Connecticut:

- Fairfield University
- Quinnipiac University
- Saint Joseph College
- Sacred Heart University
- University of Bridgeport
- University of Hartford
- University of New Haven

Legal Assistant Program policy on the transfer of legal specialty credits.

Students may take courses at another college to be transferred to the Legal Assistant Program at Naugatuck Valley Community College for credit. It is the student's responsibility to have an official transcript

of the course work sent to the Record's Office of Naugatuck Valley Community College and to the coordinator of the Legal Assistant Program for evaluation purposes. This transcript will be evaluated by the registrar and by the Legal Assistant Program coordinator. Acceptable courses will be posted to the student's academic record. Students are encouraged to meet with the coordinator and the registrar to ensure the transferability of a course from another institution before enrolling in the program. Transfer credit will be awarded for comparable courses completed at another regionally accredited higher education institution; however, no more than 12 credits of legal specialty courses may be transferred into the program from another institution.

STUDENT INSURANCE/ACCIDENT REPORTS

Injuries acquired as the result of a school related activity must be reported to the faculty or staff member in charge and to the Office of Disability Services within 24 hours of the time of the injury. Accident report forms are available in this office. For more information, contact the Office of Disability Services.

OFFICE OF DISABILITY SERVICES

Kinney Hall Room K519
Phone: 203-575-8025

Facilities at this college are uniquely appropriate to meet the needs of students with disabilities. Elevators are available to accommodate students in wheelchairs, making classrooms accessible to all students.

During the admissions process students with disabilities who may require accommodations are strongly encouraged to identify themselves to the Admissions Office. This will enable college support staff to provide appropriate assistance with program planning, placement testing, course scheduling and classroom accessibility appropriate to the student's needs.

After submitting appropriate documentation and completing the disabilities disclosure process, students with disabilities who may require accommodations must contact the Counselor for Students with Learning Disabilities in the CAPSS Office.

Students are then urged to discuss their needs with individual instructors. Discussions with faculty should occur at the beginning of each semester and each time an accommodation is required. Instructors, in conjunction with appropriate college officials, will provide assistance/accommodations only to those students who have completed the disclosure and accommodation process. If a student does not disclose a disability, the College will be unable to provide accommodations. The College reserves the right to determine the nature and extent of appropriate academic accommodations. Students requiring ambulatory assistance are strongly encouraged to identify themselves to the Office of Disability Services so that emergency evacuation plans may be made.

The College makes every attempt to adhere to both the guidelines and spirit of the Americans With Disabilities Act.

WOMEN'S CENTER

Kinney Hall room K405
Phone: (203) 575-8224 or (203) 575-8299
Website: <http://www.nv.edu/Offices-Departments/Academic-Support-Services/Womens-Center>

The mission of the Women's Center is to assist students in achieving their full potential in education, career and personal life, as they face and overcome issues unique to women. The Women's Center provides support of our students' intellectual and academic growth, professional development and personal empowerment. The Center is a safe place for women and all who identify as women to gather, to explore and to share their experiences. The Center provides information, referral, and services to facilitate education on issues related to feminism, women, men, gender, and domestic and sexual violence.

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The Women's Center organizes events of interest to women and men such as discussion groups, speaker series, workshops, book discussions, and films. Information on sexual assault, dating violence, sexual harassment, healthy relationships, body image, and health issues for women is available.

ORIENTATION

An orientation program for all new students is designed to assist in the successful transition from high school, home or the workplace to Naugatuck Valley Community College. It is intended to provide entering students with information concerning academic policies, study skills, general college procedures and requirements, the academic expectations of the College, the co-curricular and extra-curricular opportunities, and the available student services. Students should be better able to make reasoned and well-informed choices as a consequence of participation.

STUDENT ACTIVITIES

A variety of more than 33 social and educational clubs and organizations are available for participation by full and part-time students attending the College. These organizations are designed around the needs and interests of the student population. They are continuously being developed by the Office of Student Activities in conjunction with students and members of the College's faculty and staff who serve as advisors. Students are encouraged to join campus organizations as a means of meeting new friends and obtaining experiential learning opportunities outside their regular classroom programs. Funding for all clubs and organizations is provided by the Student Activity Fee and dispersed by the Student Government Association. In addition, students can find academic honor opportunities in the Academic Standards section.

STUDENT GOVERNMENT

The Student Government Association of Naugatuck Valley Community College is the recognized governing body representing the concerns and interests of the College's student community. Membership consists of representatives elected from each of the various student clubs and organizations, senators who have successfully collected petition signatures from fifty (50) members of the general student body, and four (4) officers elected each spring semester. Membership is open to all full and part-time students interested in participating. Regular weekly meetings are open to the campus community. The Student Government is responsible for the recognition and funding of all student clubs and organizations on campus. Operating funds for the Student Government are provided by the Student Activity Fee.

NVCC ALUMNI ASSOCIATION

The NVCC Alumni Association offers alumni and their families educational and cultural programs, usually at no cost. Alumni are invited to volunteer to tutor or mentor NVCC students. Alumni Association members hold their own events and often contribute to scholarships. The Office of Community Engagement has more information.

PUBLIC SAFETY SERVICES

The Public Safety Department is located in the Core Building, Room C122. The department employs sworn police officers, building and grounds officers and telecommunication operators. Sworn members of this department are empowered with all rights and responsibilities of their position as a police officer.

Parking

Specific parking areas are designated for visitors, students, faculty and staff. Parking permits are required for all faculty and staff and may be obtained at the Public Safety Office located in the Core Building, Room C122.

Students may park on a first-come, first-served basis in D lot, E lot, F lot, and P1/P2 of the core garages, overflow lot, roadways where

designated, except in those areas designated as handicapped, visitors, fire lanes or grass areas, and in those identified by a sign on special occasions. There is NO student parking in C lot or the Ekstrom garage, Monday-Friday, 6:00 am–5:00 pm. The lack of parking space does not permit the violation of a parking regulation. Vehicles may be towed if they are in violation of the parking regulations without notice to the owner. The speed limit on the roadways is 15 miles per hour.

Parking at Danbury Campus

All students are required to display a parking tag for the Danbury Parking Authority. Parking tags for students are available in the administrative office at the NVCC Danbury Campus located at 190 Main Street, Danbury, CT.)

The College does not assume responsibility for any motor vehicle, parked or in motion, or its contents.

Services Offered by the Department

The Public Safety Department responds to several types of calls for service including:

- a safety escort,
- assistance during emergency evacuations,
- assistance during medical emergencies*,
- lost and found property,
- motor vehicle accidents, and
- any suspected criminal act.

** In the event of an emergency, go to the nearest phone and dial either 8112 or 8113 for assistance.*

Report on Campus Crime

In compliance with Connecticut General Statutes section 10a-55a, the Federal Higher Education Act of 1998, concerning campus safety, the Public Safety Department produces a yearly report which identifies the mandated crimes reported and investigated on campus. This report is available on the website, posted throughout campus and in the Public Safety Office.

CAMPUS RESOURCE TEAM (CRT)

In compliance with state and federal regulations, the Campus Resource Team (CRT) will assist the College in addressing issues of Sexual Violence, Dating Violence, Stalking, and Intimate Partner Violence. The CRT consists of members of the NVCC Community as well as the local community and law enforcement. This team will meet regularly to discuss, suggest, develop, guide, and support ways to make NVCC more aware of and sensitive to the issues of Sexual Violence, Dating Violence, Stalking, and Intimate Partner Violence as well as the College policies and procedures that address these issues.

CHILD DEVELOPMENT CENTER

The Child Development Center (CDC) is designed to foster the social, physical, emotional and intellectual growth of each child by providing a warm, nurturing and enriching environment. The Center is the academic component of the Early Childhood Education Program and serves as a training center for student teachers. The Child Development Center is accredited and utilizes the Reggio Emilia Approach and the Connecticut State Frameworks. Children must be 18 months of age to enroll in the toddler program and three years of age to enroll in the pre-school program.

The extended-day program is offered:

Monday-Thursday	7:30 am - 4:00 pm
Friday	7:30 am - 12:00 noon

The half-day program is offered:

Monday-Friday	7:30 am - 12:00 noon
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Applicants are encouraged to apply as soon as possible. Traditionally, there is a waiting list of two to three years. For more information, contact the Child Development Center at (203) 596-8604.

School Readiness Component

Through the school readiness initiative children may attend the Child Development Center. Children must be 3 years old to attend and residents of Waterbury to apply. Fees are set according to a sliding fee scale. The children may attend 7:30 am - 5:30 pm, five days per week, 50 weeks per year. For more information contact the Child Development Center at (203) 596-8604.

BOOKSTORE

George D. Yonan Memorial Bookstore

The college bookstore is located on the third level of the Student Center, Room S304. In addition to textbooks, the bookstore offers course materials, supplies, clothing, electronics, gift items, etc. Bookstore hours are Monday-Tuesday 8:30 am-6:00 pm, Wednesday-Thursday 8:30 am-4:30 pm, and Friday 8:30 am-1:00 pm. Extended bookstore hours at the beginning of each semester are posted on the web site as well as the T.V. monitors throughout the campus. Textbooks may also be ordered on line through our on-line ordering system which can be found on the college web site at nv.edu click on student services and the bookstore link.

REFUND POLICY: Textbooks may be returned for full refund or exchange during the first week of the semester. Books must be clean, unmarked, in original packaging if purchased that way and not damaged in any way. *Cash register receipt MUST accompany ALL book returns.* Electronics are not returnable. Clothing is returnable as long as all tags are still attached to merchandise.

DINING SERVICES

A full service cafeteria style restaurant is available on the 5th floor of the Student Center. Service hours are anticipated to be:

Monday, Tuesday 8:30 a.m. - 6:00 p.m.

Wednesday, Thursday 8:30 a.m. - 4:30 p.m.

Friday 8:30 a.m. - 1:00 p.m.

In addition, vending services are available 24 hours a day at:

- Student Center Cafeteria
- Ekstrom Hall, 5th and 6th Floors
- Founders Hall
- Kinney Hall, 5th and 7th Floors
- Technology Hall, 5th Floor

OTHER SERVICES

Two ATMs are located on the 5th Avenue Walkway.

BRIDGE TO COLLEGE

In its strategic plan, NVCC committed to creating and strengthening bridge programs with local high schools that contribute to preparing college-ready students. These initiatives fall under the Bridge to College Office and include programs that have been in place for a number of years, such as the Connecticut Collegiate Awareness and Preparation (ConnCAP) Program, as well as new initiatives that were recently funded. These programs include:

- College Access and Challenge Grant (CACG)
- Community College Scholars Program (CCSP)
- Connecticut Collegiate Awareness and Preparation Program (ConnCAP)
- GEAR UP
- Male Encouragement Network (MEN)

For more information visit nv.edu/b2c.

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Note: The Connecticut Community Colleges are now part of the Connecticut State Colleges and Universities system, and are governed by the Board of Regents for Higher Education.

The Board of Regents has stipulated that all policies of the former Board of Trustees shall remain in effect until revised.

ASSESSMENT EXPECTATIONS

Students at Naugatuck Valley Community College are expected to spend several hours during their college career in college-wide outcome assessment activities, such as tests, surveys and interviews.

CONNTAC-EOC OFFICE

The Connecticut Talent Assistance Cooperative (CONNTAC) is a state agency funded by the United States Department of Education. A regional CONNTAC Educational Opportunity Center (EOC) is located on the Naugatuck Valley Community College campus. Services offered through the Center include: academic and career counseling, college referral and financial aid planning. For more information, call (203) 574-1140.

DRUGS AND ALCOHOL POLICY

The Board of Trustees of Community-Technical Colleges endorses the statement of the Network of Colleges and Universities committed to the elimination of drug and alcohol abuse, which is based on the following premise:

- American society is harmed in many ways by the abuse of alcohol and other drugs—decreased productivity, serious health problems, breakdown of the family structure, and strained social resources. Problems of illicit use and abuse of substances have a pervasive effect upon many segments of society—all socio-economic groups, all age levels, and even the unborn. Education and learning are especially impaired by alcohol abuse and illicit drug use.

The Board recognizes that education regarding alcohol and substance abuse is an appropriate and even necessary part of contemporary college life. Since the unauthorized use of controlled substances, in addition to the potential harmful effect it may have on students and employees, is contrary to state and federal law and regulation, it must be prohibited in any college activity, on or off the college campus. The conditions of alcohol and drug dependency may be considered disabilities or handicaps under state and federal law and regulation, and under Board of Trustees policy, and employees and students will not be discriminated against because they have these disabilities. All students and employees, however, are considered to be responsible for their actions and their conduct.

These provisions shall apply to all colleges under the jurisdiction of the Board:

1. No student or employee shall knowingly possess, use, distribute, transmit, sell, or be under the influence of any controlled substance on the college campus, or off the college campus at a college-sponsored activity, function or event. Use or possession of a drug authorized by a medical prescription from a registered physician shall not be a violation of this provision.
2. All colleges shall develop and enforce policies regarding the sale, distribution, possession, or consumption of alcoholic beverages on campus, subject to state and federal law. Consistent with previous Board policy, the consumption of alcoholic beverages on campus may be authorized by the president subject to the following conditions, as appropriate:
 - a. when a temporary permit for the sale of alcoholic beverages has been obtained and dram shop act insurance has been purchased;
 - b. when a college permit has been obtained;
 - c. when students bring their own beverages;
 - d. when alcoholic beverages are provided by a student organization and no fee is charged for attendance or for said beverages.

All colleges shall provide educational programs on the abuse of alcohol and other drugs and referral for assistance for students and employees who seek it. Colleges are encouraged to establish campus-wide committees to assist in development of these programs in response to particular campus needs and identification of referral

resources in their respective service planning regions.

3. This policy shall be published in all college catalogs, faculty/staff manuals, and other appropriate literature.
4. Failure to comply with this policy will result in invocation of the appropriate disciplinary procedure and may result in separation from the college and referral to the appropriate authorities for prosecution.

PERSONS WITH DISABILITIES POLICY

The Board of Trustees of Community-Technical Colleges and all of the colleges under its jurisdiction are committed to the goal of achieving equal educational opportunity and full participation for people with disabilities in the Community-Technical Colleges. To that end, this statement of policy is put forth to reaffirm our commitment to ensure that no qualified person be excluded from participation in, be denied the benefits of, or otherwise be subjected to discrimination under any program or activity on a community-technical college campus or in the central office of the Board of Trustees.

The Board recognizes that a physical or functional impairment is a disability only to the extent that it contributes to cutting the person off from some valued experience, activity or role. Higher education is, therefore, especially important to people with disabilities, since it aims to increase every student's access to valued experiences, activities, and roles. Improving access for students and employees means removing existing barriers that are physical, programmatic and attitudinal. It also means taking care not to erect new barriers along the way.

The efforts of the Community Colleges to accommodate people with disabilities should be measured against the goals of full participation and integration. Services and programs best promote full participation and integration of people with disabilities when they complement and support, but do not duplicate the regular services and programs of the college.

Achieving the goal of full participation and integration of people with disabilities requires cooperative efforts within and among higher education institutions. The Board of Trustees will work with the Board of Governors to achieve a higher level of services and appropriate delivery methods at all Connecticut Community Colleges.

This statement is intended to reaffirm the Board's commitment to affirmative action and equal opportunity for all people and in no way to replace the equal opportunity policy statement.

I. STUDENT CODE OF CONDUCT

Preamble

Academic institutions exist for the transmission of knowledge, the pursuit of truth, the development of students, and the general well-being of society. In line with this purpose, the Board of Regents for Higher Education ("BOR") in conjunction with the Connecticut State Colleges and Universities ("CSCU") has the duty to protect the freedoms of inquiry and expression, and furthermore, has the responsibility to encourage all of its members to develop the capacity for critical judgment in their sustained and independent search for truth.

CSCU has certain self-defined institutional values. Principal among these values is respect for the safety, dignity, rights, and individuality of each member of the CSCU Community. The opportunity to live, study, and work in an institution which values diverse intellectual and cultural perspectives and encourages discussion and debate about competing ideas in an atmosphere of civility is a basic component of quality higher education.

All members of CSCU must at all times govern their social and academic interactions with tolerance and mutual respect so that the students who pass through a CSCU door are enriched by these experiences and are prepared for full and enlightened

participation in a multi-cultural society. Because of the BOR's and CSCU's commitment to principles of pluralism, mutual respect, and civility, certain activities are not acceptable on CSCU campuses. Acts of intolerance, of hatred or violence based on race, religion, sexual orientation or expression, disability, gender, age, or ethnic background are antithetical to the BOR's and CSCU's fundamental principles and values. It is the BOR's and CSCU's responsibility to protect our students' right to learn by establishing an environment of civility.

The disciplinary process is intended to be part of the educational mission of CSCU. Student disciplinary proceedings are not criminal proceedings and are not subject to court rules of procedure and evidence.

Introduction

This Student Code of Conduct (hereinafter the "Student Code" or "Code") is intended to present a clear statement of student rights and responsibilities established by the Board of Regents for Higher Education. The BOR has charged the President of the Board of Regents for Higher Education with developing procedures to protect those rights and to address the abdication of responsibilities in collaboration with the four State Universities, the twelve Community Colleges and Charter Oak State College. The Student Code describes the types of acts that are not acceptable in an academic community.

Disclaimer: This Code is neither a contract nor an offer of a contract between any BOR governed institution and any student. The provisions of this Code are subject to revision at any time.

Part A: Definitions

The following list of defined terms utilized throughout this Student Code is provided in an effort to facilitate a more thorough understanding of the Code. This list is not intended to be a complete list of all the terms referenced in the Student Code that might require interpretation or clarification. The Vice President for Student Affairs at a University, the Dean of Students at a Community College, the Provost at Charter Oak State College or their designee shall make the final decision of the interpretation of the definition of any term found in the Student Code. For purposes of interpretation and application of the Student Code only, the following terms shall have the following meanings:

1. "**Accused Student**" means any student accused of violating this Student Code.
2. "**Advisor**" means a person who accompanies an Accused Student or an alleged victim to a hearing (or a proceeding pertaining to a report of sexual violence) for the limited purpose of providing advice and guidance to the student. An advisor may not directly address the Hearing Body, question witnesses, or otherwise actively participate in the hearing process (or other proceeding pertaining to a report of sexual violence).
3. "**Appellate Body**" means any person or persons authorized by the University Vice President for Student Affairs, Community College Dean of Students, Charter Oak State College Provost or their designee to consider an appeal from a determination by a Hearing Body that a student has violated the Student Code.
4. "**Calendar Days**" means the weekdays (Mondays through Fridays) when the University or College is open.
5. "**College**" means either collectively or singularly any of the following institutions: Asnuntuck Community College, Capital Community College, Gateway Community College, Housatonic Community College, Manchester Community College, Middlesex Community College, Naugatuck Valley Community College, Northwestern Connecticut Community College, Norwalk Community College, Quinebaug Valley Community College, Three Rivers Community College, Tunxis Community College, and Charter Oak State College.

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6. “**Complainant(s)**” means the person(s) who initiates a complaint by alleging that a Student(s) violated the Code.
7. “**CSCU**” means either collectively or singularly, any of the following institutions: Central Connecticut State University, Eastern Connecticut State University, Southern Connecticut State University, Western Connecticut State University; Asnuntuck Community College, Capital Community College, Gateway Community College, Housatonic Community College, Manchester Community College, Middlesex Community College, Naugatuck Valley Community College, Northwestern Connecticut Community College, Norwalk Community College, Quinebaug Valley Community College, Three Rivers Community College, Tunxis Community College, and Charter Oak State College.
8. “**CSCU Affiliates**” means individuals and/or entities with whom or with which the College or University has a contractual relationship.
9. “**CSCU Official**” means any person employed by the College or University to perform assigned administrative, instructional, or professional responsibilities.
10. “**CSCU Premises**” means all land, buildings, facilities, and other property in the possession of, or owned, used, and/or controlled by, the University or College, either solely or in conjunction with another entity.
11. “**Disciplinary Officer**” or “**Conduct Administrator**” means a University, College or CSCU official who is authorized to determine the appropriate resolution of an alleged violation of the Code, and/or to impose sanctions or affect other remedies as appropriate. Subject to the provisions of this Code, a disciplinary officer or conduct administrator is vested with the authority to, among other duties: investigate a complaint of an alleged violation of the Code decline to pursue a complaint, refer identified disputants to mediation or other appropriate avenues of resolution, establish charges against a student, enter into an administrative agreement developed with an Accused Student in accordance with Section II-B-3 of this Code, advise a Hearing Body, and present the case before the Hearing Body.
12. “**Hearing Body**” or “**Hearing Panel**” means any person or persons authorized by the University Vice President for Student Affairs, Community College Dean of Students or Charter Oak State College Provost to determine whether a student has violated the Code and to impose sanctions as warranted, including a hearing officer or hearing board.
13. “**Institution**” means the University or College within CSCU.
14. “**Instructor**” means any faculty member, teaching assistant or any other person authorized by the University to provide educational services, including, but not limited to, teaching, research, and academic advising.
15. “**Member of the CSCU Community**” means any person who is a student, an official or any other person who works for CSCU, either directly or indirectly (e.g., for a private enterprise doing business on a CSCU campus).
16. “**Policy**” means the written regulations, standards, and student conduct expectations adopted by the BOR and found in, but not limited to the Student Handbook, the Residence Life Handbook, the housing contract, the graduate and undergraduate catalogs, and other publicized University and College notices.
17. “**Prohibited Conduct**” means the conduct prohibited by this Code, as more particularly described in Part I-D of this Code.
18. “**Reporting Party**” means any person who alleges that a student has violated this Code.
19. “**Student**” means either (1) any person admitted, registered, enrolled or attending any CSCU course or CSCU conducted program, whether full-time or part-time, and whether pursuing undergraduate, graduate or professional studies, or continuing education; (2) any person who is not officially enrolled for a particular term but who has

a continuing relationship with a CSCU; or (3) any person within two calendar years after the conclusion of their last registered Community College course unless the student has formally withdrawn, graduated or been expelled from the College.

20. “**Student Code**” or “**Code**” means this Student Code of Conduct.
21. “**Student Organization**” means an association or group of persons that have complied with the formal requirements for University or College recognition.
22. “**Support Person**” means a person, who accompanies an Accused Student, a Reporting Party or a victim to a hearing for the limited purpose of providing support and guidance. A support person may not directly address the Hearing Body, question witnesses, or otherwise actively participate in the hearing process.
23. “**University**” means any of the following institutions: Central Connecticut State University, Eastern Connecticut State University, Southern Connecticut State University, and Western Connecticut State University, whichever the alleged violation of the Code occurred.
24. “**Shall**” and “**will**” are used in the imperative sense.
25. “**May**” is used in the permissive sense.

Part B: Application, Distribution and Administration of the Student Code of Conduct

1. **Application of the Student Code:** The Student Code shall apply to the four Connecticut State Universities, the twelve Community Colleges, and the on-line college: Central Connecticut State University, Eastern Connecticut State University, Southern Connecticut State University, Western Connecticut State University; Asnuntuck Community College, Capital Community College, Gateway Community College, Housatonic Community College, Manchester Community College, Middlesex Community College, Naugatuck Valley Community College, Northwestern Connecticut Community College, Norwalk Community College, Quinebaug Valley Community College, Three Rivers Community College, Tunxis Community College, and Charter Oak State College.

An alleged violation of the Student Code shall be addressed in accordance with the Code of Conduct, even if the accused Student has withdrawn from the Institution prior to the completion of the disciplinary procedures.

The Student Code shall apply to Students and to University Student Organizations. The term “student” shall generally apply to the student as an individual and to a Student Organization as a single entity. The officers or leaders of a particular Student Organization usually will be expected to represent the organization during the disciplinary process. Nothing in this Student Code shall preclude holding certain members of a Student Organization accountable for their individual acts committed in the context of or in association with the organization’s alleged violation of this Code.

2. **Distribution of the Student Code:** The Student Code shall be made readily available electronically and/or in a printed publication to students, faculty and staff. The office responsible for Student Affairs will annually distribute and make available to students, faculty and staff, electronically and/or in a printed publication, any revisions to the Code.

3. **Administration of the Student Code:** A University’s and Charter Oak State College’s Provost or a Community College’s Dean of Students shall be the person designated by the institution President to be responsible for the administration of the Academic Misconduct portion of the Student Code. A University’s Vice President for Student Affairs, a Community College’s Dean of Students, or Charter Oak State College’s Provost shall be the person designated by the institution President to be responsible for the administration of the Non-Academic Misconduct portion of the Student Code.

Part C: Scope of Authority

A Student who is found responsible for engaging in conduct that violates the Student Code on any CSCU campus or on property controlled by the BOR or by any CSCU Affiliate or any CSCU sponsored function or event shall be subject to the sanctions described in this Code. The Student Code of Conduct also applies to online activities, where applicable. Students who attempt to engage in conduct that violates this Code, who knowingly encourage, aid or assist another person in engaging in such conduct, or who agree with another person, explicitly or otherwise, to engage in such conduct, may also be subject to disciplinary action.

Off-campus misconduct by University students may be subject to the jurisdiction of the University and addressed through its disciplinary procedures if one of the following conditions is met: (i) a Student engages in prohibited conduct at an official University event, at a University-sanctioned event, or at an event sponsored by a recognized University Student Organization; or (ii) a Student engages in prohibited conduct under such circumstances that reasonable grounds exist for believing that the Accused Student poses a threat to the life, health or safety of any member of the CSCU or to the property of the CSCU.

Community College students conduct is subject to the Code on campus and off-campus whenever such conduct impairs College-related activities or affairs of another member of the College community or creates a risk of harm to a member or members of the College community. Students must be aware that, as citizens, they are subject to all federal and state laws in addition to all CSCU regulations governing student conduct and responsibilities. Students do not relinquish their rights nor do they shed their responsibilities as citizens by becoming members of the CSCU Community. However, where a court of law has found a student to have violated the law, an institution has the right to impose the sanctions of this Code even though the conduct does not impair institution-related activities of another member of the university or college community and does not create a risk of harm to the college or university community. The decision to exercise this right will be in the sole discretion of the President of the impacted institution or his/her designee.

Charter Oak State College applies this Code to matriculated and non-matriculated students, including those participating in portfolio assessment, credential evaluation, testing, or contract learning. Jurisdiction shall be limited to student conduct that occurs while students are taking Charter Oak State College courses or availing themselves of Charter Oak State College services. However, if a matriculated Charter Oak State College student is found guilty of student misconduct at another institution, including but not limited to misrepresentation of records from other institutions, the student may be subject to disciplinary action at Charter Oak State College.

Part D: Prohibited Conduct

The following list of behaviors is intended to represent the types of acts that constitute violations of this Code.

1. Academic misconduct, which includes, but is not limited to, plagiarism and all forms of cheating.

Plagiarism is defined as the submission of work by a student for academic credit as one's own work of authorship which contains work of another author without appropriate attribution.

Cheating includes, but is not limited to: (i) use of any unauthorized assistance in taking quizzes, tests or examinations; (ii) use of sources beyond those authorized by the instructor in writing papers, preparing reports, solving problems or carrying out other assignments; (iii) the acquisition, without permission, of tests or other academic material belonging to a member of the University faculty or staff; and (iv) engaging in any other behavior specifically prohibited by a faculty member in the course syllabus.

2. Acts of dishonesty, including but not limited to the following:

a. Misuse of University or College documents, including, but not limited to forging, transferring, altering or otherwise misusing a student fee card, student payroll card, identification card or other College or University identification document, course registration document, schedule card, transcript, or any other institution-issued document or record.

b. Knowingly furnishing false information to any CSCU Official, faculty member or office.

3. Theft of property or services, or damage to, defacement or destruction of, or tampering with, real or personal property owned by the State of Connecticut, CSCU/BOR, the institution, or any member of the CSCU Community.

4. Actual or threatened physical assault or abuse, threatening behavior, intimidation, or coercion.

5. Sexual misconduct may include engaging in one of more behaviors:

(a) **Sexual harassment**, which can include any unwelcome sexual advance or request for sexual favors, or any conduct of a sexual nature when submission to such conduct is made either explicitly or implicitly a term or condition of an individual's education; submission to or rejection of such conduct by an individual is used as a basis for academic decisions affecting the individual; or such conduct has the purpose or effect of substantially interfering with an individual's academic performance or creating an intimidating, hostile or offensive educational environment. Examples of conduct which may constitute sexual harassment include but are not limited to:

- sexual flirtation, touching, advances or propositions
- verbal abuse of a sexual nature
- pressure to engage in sexual activity
- graphic or suggestive comments about an individual's dress or appearance
- use of sexually degrading words to describe an individual
- display of sexually suggestive objects, pictures or photographs
- sexual jokes
- stereotypic comments based upon gender
- threats, demands or suggestions that retention of one's educational status is contingent upon toleration of or acquiescence in sexual advances.

(b) **Sexual assault** shall include but is not limited to a sexual act directed against another person when that person is not capable of giving consent, which shall mean the voluntary agreement by a person in the possession and exercise of sufficient mental capacity to make a deliberate choice to do something proposed by another.

A person who initially consents to sexual activity shall be deemed not to have consented to any such activity which occurs after that consent is withdrawn. Consent cannot be assumed because there is no physical resistance or other negative response. A lack of consent may result from mental incapacity (e.g., ingestion of alcohol or drugs which significantly impair awareness or judgment) or physical incapacity (e.g., the person is unconscious or otherwise unable to communicate consent). Consent must be affirmative. (See Sexual Misconduct Reporting, Support Services and Processes Policy).

Sexual assault is further defined in sections 53a-70, 53a-70a, 53a-70b, 53a-71, 53a-72a, 53a-72b and 53a-73a of the Connecticut General Statutes.

(c) **Sexual exploitation** occurs when a person takes non-consensual or abusive sexual advantage of another for anyone's advantage or benefit other than the person being exploited, and that behavior does not otherwise constitute one of the preceding sexual misconduct offenses. Examples of behavior that could rise to the level of sexual exploitation include:

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- Prostituting another person;
 - Non-consensual visual (e.g., video, photograph) or audio-recording of sexual activity;
 - Non-consensual distribution of photos, other images, or information of an individual's sexual activity, intimate body parts, or nakedness, with the intent to or having the effect of embarrassing an individual who is the subject of such images or information;
 - Going beyond the bounds of consent (such as letting your friends hide in the closet to watch you having consensual sex);
 - Engaging in non-consensual voyeurism;
 - Knowingly transmitting an STI, such as HIV to another without disclosing your STI status;
 - Exposing one's genitals in non-consensual circumstances, or inducing another to expose his or her genitals; or
 - Possessing, distributing, viewing or forcing others to view illegal pornography.
6. Intimate partner violence is defined as:
- Including intimate partner violence, which is any physical or sexual harm against an individual by a current or former spouse or by a partner in a dating relationship that results from (1) sexual assault, as defined in section 5 above; (2) sexual assault in a spousal or cohabiting relationship; (3) domestic violence; (4) sexual harassment, as defined in section 5 above or, (5) sexual exploitation, as defined in section 5 above.
 - Physical abuse, which can include but is not limited to, slapping, pulling hair or punching.
 - Threat of abuse, which can include but is not limited to, threatening to hit, harm or use a weapon on another (whether victim or acquaintance, friend or family member of the victim) or other forms of verbal threat.
 - Emotional abuse, which can include but is not limited to, damage to one's property, driving recklessly to scare someone, name calling, threatening to hurt one's family members or pets and humiliating another person.
7. Violations of privacy, including, but not limited to, voyeurism and the use of web-based, electronic or other devices to make a photographic, audio or video record of any person without his or her express consent, when such a recording is intended or likely to cause injury or distress. This includes, but is not limited to: (i) surreptitiously taking pictures or videos of another person in spaces such as sleeping areas, bathrooms, gymnasiums, locker rooms, and changing areas; and (ii) sexually exploiting another person by electronically recording or permitting others to view or electronically record, consensual sexual activity without a partner's knowledge or permitting others to view or listen to such video or audio tapes without a partner's knowledge and consent. Publicizing or threatening to publicize such records will also be considered a violation of this Code.
8. Hazing, which is defined as an act which endangers the mental or physical health or safety of a Student, or which destroys, damages, or removes public or private property for the purpose of initiation or admission into, affiliation with or as a condition for continued membership in a group or organization. The express or implied consent of the victim will not be a defense to an allegation of hazing. Consenting to the activity by remaining silent or not objecting in the presence of hazing is not a neutral act and is also a violation of this Student Code.
9. Stalking, which is defined as repeatedly contacting another person when:
- a. The contacting person knows or should know that the contact is unwanted by the other person; and
 - b. The contact causes the other person reasonable apprehension of imminent physical harm or the contacting person knows or should know that the contact causes substantial impairment of the other person's ability to perform the activities of daily life.
- As used in this definition, the term "contacting" includes, but is not limited to, communicating with (including internet communication via e-mail, instantmessage, on-line community or any other internet communication) or remaining in the physical presence of the other person.
10. Harassment, which is defined as conduct which is abusive or which interferes with a person's pursuit of his or her customary or usual affairs, including, but not limited to, such conduct when directed toward an individual or group because of race, ethnicity, ancestry, national origin, religion, gender, sexual orientation or expression, age, physical attribute, or physical or mental disability or disorder, including learning disabilities and mental retardation.
11. Conduct that is disorderly, lewd or indecent (including, but not limited to, public nudity and sexual activity in areas generally open to members of the campus community), breach of peace or aiding, abetting or procuring another person to breach the peace on CSCU premises or at functions sponsored by, or affiliated with the University or College.
12. Behavior or activity which endangers the health, safety, or well-being of oneself or others.
13. Offensive or disorderly conduct which causes interference, annoyance or alarm or recklessly creates a risk thereof at CSCU or CSCU premises, CSCU web or social media sites, at a CSCU-sponsored activity or in college or university courses, including cyber bullying. This offense does not apply to speech or other forms of constitutionally protected expression.
14. Unauthorized possession, duplication or use of keys (including, but not limited to, card access, card keys, fobs, etc.) to any CSCU premises or forcible and/or unauthorized entry on or into CSCU premises.
15. Starting fires, causing explosions, falsely reporting the presence of fire, bombs, incendiary or explosive devices, or falsely reporting an emergency.
16. Unauthorized or improper possession, use, removal, tampering or disabling of fire and/or safety equipment and warning devices, failure to follow standard fire and/or emergency safety procedures, or interference with firefighting or emergency response equipment or personnel.
17. Use, possession, purchase, sale or distribution of alcoholic beverages, except as expressly permitted by law and CSCU regulations. Alcoholic beverages may not, under any circumstances, be used by, possessed by, or distributed to any person under twenty-one (21) years of age.
18. Use, possession, purchase, sale, distribution or manufacturing of narcotics, controlled substances and/or drugs, including, but not limited to, marijuana and heroin, or drug paraphernalia, except as expressly permitted by law.
19. Use, possession or distribution of firearms, ammunition for firearms, other weapons or dangerous instruments, facsimiles of weapons or firearms, fireworks, explosives or dangerous chemicals. A dangerous instrument is any instrument, article or substance that, under the circumstances in which it is being utilized, is capable of causing death or serious physical injury. The possession of a deadly weapon or dangerous instrument on campus is strictly prohibited, even if such item is legally owned.
20. Gambling, including, but not limited to, promoting, wagering, receiving monies for wagering or gambling for money or property on CSCU premises.

21. Disruption or obstruction of any College or University function, activity or event, whether it occurs on or off the campus, or of any non-University or College function, activity or event which is authorized by the institution to occur on its premises.
22. Intentional obstruction of the free flow of pedestrian or vehicular traffic on CSCU premises or at University or College-sponsored or supervised functions or interference with entry into or exit from CSCU premises or with the free movement of any person.
23. Failure to comply with the directions of CSCU officials or law enforcement officers acting in the performance of their duties and/or failure to identify oneself to these persons when requested to do so.
24. Conduct that violates published BOR/CSCU policies, rules, and regulations, including, but not limited to, residence hall rules and regulations.
25. Conduct prohibited by any federal, state, and/or local law, regulation or ordinance.
26. Unauthorized use of CSCU property or the property of members of the CSCU Community or of CSCU Affiliates.
27. Theft, unauthorized use, or abuse of University or College computers and/or peripheral systems and networks, including, but not limited to:
 - a. Unauthorized access to CSCU computer programs or files;
 - b. Unauthorized alteration, transfer or duplication of CSCU computer programs or files;
 - c. Unauthorized use of another individual's identification and/or password;
 - d. Deliberate disruption of the operation of CSCU computer systems and networks;
 - e. Use of the Institution's computing facilities and resources in violation of copyright laws (including unauthorized peer-to-peer file sharing of copyrighted material, including, but not limited to, copyrighted music, movies, and software);
 - f. Use of computing facilities and resources to send obscene messages (which are defined as messages which appeal mainly to a prurient, shameful or morbid interest in nudity, sex, excretion, sadism or masochism, go well beyond customary limits of candor in describing or representing such matters, and are utterly without redeeming social value); and
 - g. Violation of the BOR Policy Statement on Acceptable and responsible use of Information Technology resources and/or any applicable BOR computer use policy.
28. Abuse of the CSCU conduct and disciplinary system, including but not limited to:
 - a. Failure to obey the notice from a Hearing Body or CSCU Official to appear for a meeting or hearing as part of the Student Conduct system;
 - b. Falsification, distortion, or intentional misrepresentation of information to a Disciplinary Officer or Conduct Administrator, or before a Hearing Body;
 - c. Initiation of a conduct or disciplinary proceeding knowingly without cause;
 - d. Disruption or interference with the orderly conduct of a disciplinary proceeding;
 - e. Attempting to discourage an individual's proper participation in, or use of, the disciplinary system;
 - f. Attempting to influence the impartiality of a Disciplinary Officer, Conduct Administrator or member of a Hearing Body prior to, and/or during the course of, the disciplinary proceeding;
 - g. Harassment (verbal or physical) and/or intimidation of a

Disciplinary Officer, Conduct Administrator, or member of a Hearing Body prior to, and/or during the course of the disciplinary proceeding;

h. Failure to comply with the sanction(s) imposed under the Student Code; and

i. Influencing or attempting to influence another person to commit an abuse of the disciplinary system.

Part E: Hearing Procedures for Sexual Misconduct, Sexual Intimate Partner, Domestic Violence & Stalking Reports

In addition to disciplinary procedures applicable to State University students in Section II, Community College students in Section III, or Charter Oak State College Students in Section IV, for any hearing conducted involving allegations of sexual misconduct, including sexual harassment, sexual assault, sexual exploitation, stalking and intimate partner violence the reported victim and the accused student shall each have the following rights::

1. At any meeting or proceeding, both the reported victim and accused student may be accompanied by an advisor or support person of the student's choice provided the advisor or support person does not cause a scheduled meeting or hearing to be delayed or postponed and provided an advisor or support person may not directly address the Hearing Body, question witnesses, or otherwise actively participate in the hearing process (or other proceeding or pertaining to a report of sexual misconduct);
2. The reported victim of sexual misconduct is entitled to request that disciplinary proceedings begin promptly;
3. Any hearing regarding an accusation of sexual misconduct shall (i) be fair, prompt and impartial; (ii) be conducted by a Hearing Body annually trained in issues relating to sexual misconduct (iii) use the preponderance of evidence (more likely than not) standard; (iv) shall allow both the accused student and reported victim the opportunity to present evidence and witnesses on their behalf during any disciplinary proceeding; (v) shall provide both the accused student and the reported victim with equal access to any information that will be used during meetings and hearings; and (vi) invoke the standard of "affirmative consent¹" in determining whether consent to engage in sexual activity was given by all persons who engaged in sexual activity .
4. In accordance with the Family Educational Rights and Privacy Act (FERPA), the accused student and the reported victim have the right to keep their identities confidential;
5. Any reported victim shall be provided written notice of the decision of the Hearing Body at the same time as the accused student, normally within one (1) business day after the conclusion of the Hearing. In accordance with the Family Educational Rights and Privacy Act (FERPA) the notice to any reported victim of sexual misconduct shall contain only the following: the name of the accused student, the violation committed, if any, and any sanction imposed against the accused student.
6. The reported victim shall have the same right to request a review of the decision of the Hearing Body (appeal rights) in the same manner and on the same basis as shall the accused student; however, if a request for review by a reported victim is determined to be properly made and if the review determines there is sufficient grounds for altering the decision of the Hearing Body, among the other actions that may be taken as set forth above, the sanction of the hearing may also be increased. Notwithstanding the foregoing, in any hearing pertaining to sexual misconduct both the reported victim and the accused student are entitled to be simultaneously provided notice of any change in the results of the hearing prior to the time when the results become final as well as to be notified when such results become final.

¹The standard of "Affirmative Consent" is set forth in the BOR Sexual Misconduct Reporting, Support Services and Processes Policy and is incorporated herein by reference.

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Part F: Conduct and Disciplinary Records

The written decision resulting from an administrative conference or a hearing under this Code shall become part of the student's educational record and shall be subject to the provisions of the Family Educational Rights and Privacy Act (FERPA). A student's disciplinary record shall be maintained separately from any other academic or official file maintained by the Institution. Disciplinary records will be maintained for a period of five (5) years from the date of the incident, except that the sanction of expulsion shall be noted permanently.

While student education records are generally protected from disclosure by FERPA, there are a number of exceptions to this rule. Students should be aware that a record concerning his/her behavior while a student at the College or University may be shared with other colleges or universities to which the student may subsequently wish to transfer or be admitted. Similarly, prospective employers may require a student to provide access to his/her education records as part of the employment application process. A record of having been sanctioned for conduct that violates Section I.D. of the Code may disqualify a student for admission to another college or university, and may interfere with his/her selection for employment.

Part G: Interpretation and Revision

Questions regarding the interpretation of this Code shall be referred to the University's and Charter Oak State College's Provost or a Community College's Dean of Students or their designees for the administration of the Non-Academic Misconduct portion of the Student Code and to the University's Vice President for Student Affairs, a Community College's Dean of Academic Affairs or Charter Oak State College's Provost or their designees for the administration of the Academic Misconduct portion of the Student Code.

This Code shall be reviewed and revised, if and as necessary, every five (5) years, or as directed by the President of the Board of Regents for Higher Education.

CONDUCT AND DISCIPLINARY PROCEDURES APPLICABLE TO COMMUNITY COLLEGE STUDENTS

Procedures for Community College students differ from those procedures applicable to either the Universities or Charter Oak State College. This is due to the environmental, cultural and administrative differences within the types of the institutions comprising CSCU. Procedures for addressing allegations and sanctions regarding academic misconduct (as defined in Section I.D.1 above) for Community College Students as set for in this Section III of the Code.

Part A: Disciplinary Procedures (Academic and Non-Academic Misconduct)

In regard to College Students, the following procedures shall govern the enforcement of the Code:

1. Information that a student may have violated the Code should be submitted to the Dean of Students, Dean of Academic Affairs or other designee of the President (hereinafter referred to as "the Dean"), normally within thirty (30) calendar days of the date of a possible violation or within thirty (30) calendar days of the date that the facts constituting a possible violation were known.

2. Upon receipt of information relating to a possible violation, the Dean may immediately place restrictions on or suspend a student on an interim basis if, in the judgment of the Dean, the continued presence of the student at the College or continued participation in the full range of college activities poses a danger to persons or property or constitutes an ongoing threat of disrupting the academic process.

a. "Interim restrictions" are limitations on the Student's participation in certain College functions and activities, access to certain locations on campus or access to certain persons, that do not prevent the Student from continuing to pursue his/her academic program. A Student upon whom the Dean has placed interim restrictions shall be afforded written reasons for the restrictions, as well as the time period during which the interim

restrictions shall apply. The decision of the Dean regarding interim restrictions shall be final.

b. "Interim suspension" is the temporary separation of the Student from the College that involves the denial of all privileges, including entrance to College premises. Prior to imposing an interim suspension, the Dean shall make a good faith effort to meet with the Student. At this meeting, the Dean shall inform the Student of the information received and provide the Student an opportunity to present other information for the Dean's consideration. Based upon the information available at that time, the Dean shall determine whether the Student's continued presence on campus poses a danger to persons or property or constitutes an ongoing threat of disrupting the academic process. A Student suspended on an interim basis by the Dean shall be provided written reasons for the suspension and shall be entitled to an administrative conference or a hearing as soon as possible, normally within ten (10) calendar days from the date the interim suspension was imposed. The decision of the Dean regarding an interim suspension shall be final.

3. Following the imposition of interim restrictions or interim suspension, if any, the Dean shall promptly investigate the information received by meeting with individuals who may have knowledge of the matter, including the accused Student, and by reviewing all relevant documents.

If upon the conclusion of the Dean's investigation, the Dean determines that there is insufficient reason to believe the Student has committed a violation of any part of Section I.D. of this Policy, the Dean shall dismiss the matter and shall so inform the Student in writing.

4. If upon the conclusion of the Dean's investigation, the Dean determines that there is reason to believe the Student has committed a violation of any part of Section I. D. of this Code and, after considering both the possible violation and the prior conduct record of the Student, that a sanction of less than suspension or expulsion is appropriate, the Dean shall schedule an administrative conference with the Student. The Student shall be given reasonable notice of the time and place of the conference. At the administrative conference, the Student shall have the opportunity to present information for the Dean's consideration. At the conclusion of the administrative conference, the Dean shall determine whether it is more likely than not that the Student has violated the Policy and, if so, impose a sanction less than suspension or expulsion. The Dean shall provide the Student with a written explanation for the determination. The decision of the Dean shall be final.

5. If upon the conclusion of the Dean's investigation, the Dean determines that there is reason to believe the Student has committed a violation of any part of Section I.D. of this Code and, after considering both the violation and the prior conduct record of the Student, that a sanction of suspension or expulsion is appropriate, the Dean shall provide the Student with reasonable written notice of a meeting and shall inform the Student that his/her failure to attend the meeting or to respond to the notice may result in the imposition of the maximum permissible sanction. At the meeting, the Dean shall provide the Student with a written statement that shall include the following:

- a. a concise statement of the alleged facts;
- b. the provision(s) of Section I.D. that appear to have been violated;
- c. the maximum permissible sanction; and
- d. a statement that the student may resolve the matter by mutual agreement with the Dean, or may request a hearing by notifying the Dean in writing, which must be received by 5:00pm on the following business day.

6. If the Student requests a hearing, he/she is entitled to the following:
 - a. to be heard within five (5) days or as soon as reasonably possible, by an impartial party or panel whose members shall be appointed by the Dean;
 - b. if the Dean appoints an impartial panel, to have a Student on the panel if requested by the Student;
 - c. to appear in person and to have an advisor who not shall attend as a representative of the Student. However, if there is pending at the time of the hearing a criminal matter pertaining to the same incident that is the subject of the hearing, a lawyer may be present for the sole purpose of observing the proceedings and advising the Student concerning the effect of the proceedings on the pending criminal matter;
 - d. to hear and to question the information presented;
 - e. to present information, to present witnesses, and to make a statement on his or her behalf; and
 - f. to receive a written decision following the hearing.

7. As used herein, the term “impartial” shall mean that the individual was not a party to the incident under consideration and has no personal interest in the outcome of the proceedings. Prior to the commencement of the hearing, the Student who is subject to the hearing may challenge the appointment of an impartial party or panel member on the ground that the person(s) is (are) not impartial. The challenge shall be made in writing to the Dean and shall contain the reasons for the assertion that the person(s) is (are) not impartial. The decision of the Dean shall be final.

8. The written decision of the impartial party or panel shall specify whether, based on the information presented, it is more likely than not that the Student committed the violation(s) reported and shall state the sanction to be imposed, if any. The written decision shall be provided to the Student.

9. Sanctions imposed by an impartial party or panel are effective immediately. The President may, for good cause, suspend imposition of the sanctions imposed by the impartial party or panel to allow the Student time to prepare a written request for review. If a written request is received, the President may continue to suspend imposition of the sanctions until he has reviewed and acted on the Student’s request.

10. A written request for review of the decision of the impartial party or panel must be received by the President within three (3) calendar days after the Student is notified of the decision and must clearly identify the grounds for review. The review by the President is limited to the record of the hearing, the written request, and any supporting documentation submitted with the request by the Student. The decision of the impartial party or the panel shall be upheld unless the President finds that:

- a. a violation of the procedures set forth herein significantly prejudiced the Student; and/or
- b. the information presented to the impartial party or panel was not substantial enough to justify the decision; and/or,
- c. the sanction(s) imposed was (were) disproportionate to the seriousness of the violation.

11. Decisions under this procedure shall be made only by the college officials indicated.

Part B: Disciplinary Actions

The prior conduct record of a Student shall be considered in determining the appropriate sanction for a Student who has been found to have violated any part of Section I.D. of this Code. Sanctions shall be progressive in nature; that is, more serious sanctions may be imposed if warranted by the prior conduct record of the Student.

A “sanction” may be any action affecting the status of an individual as a Student taken by the College in response to a violation of this Policy, and for the purposes of this Section III of the Code include but are not limited to the following:

1. “Expulsion” is a permanent separation from the College that involves denial of all Student privileges, including entrance to College premises;
2. “Suspension” is a temporary separation from the College that involves denial of all Student privileges, including entrance to college premises for the duration of the suspension, and may include conditions for reinstatement;
3. “Removal of College Privileges” involves restrictions on Student access to certain locations, functions and/or activities but does not preclude the Student from continuing to pursue his/her academic program;
4. “Probation” is a status that indicates either (a) serious misconduct not warranting expulsion, suspension, or removal of College privileges, or (b) repetition of misconduct after a warning has been imposed;
5. A “Warning” is a written notice to the Student indicating that he or she has engaged in conduct that is in violation of Section I.D. of this Code and that any repetition of such conduct or other conduct that violates this Code is likely to result in more serious sanctions;
6. “Community Restitution” requires a Student to perform a number of hours of service on the campus or in the community at large.

Clery Act

Jeanne **Clery** Disclosure of Campus Security Policy and Campus Crime Statistics **Act** Report In compliance with Section 486(e) of Public Law: 105-244 available at nv.edu/clery.

STUDENT RIGHTS POLICY

Naugatuck Valley Community College adheres to the Board of Trustees of Community-Technical Colleges non-discrimination policy as stated in the General Overview section of this catalog.

Students are entitled to an atmosphere conducive to learning and to impartial treatment in all aspects of the teacher-student relationship. The student should not be forced by the authority inherent in the instructional role to make particular personal choices as to political action on his or her own part in society. Evaluation of students and the award of credit must be based on academic performance, regardless of personality, race, religion, degree of political activism, or personal beliefs. Students are free to take reasoned exception to the data or views offered in any course of study, but they are responsible for learning the content of the course of study as defined by official college publications.

Community college students are both citizens and members of the academic community. As citizens they enjoy the same freedom of speech, peaceful assembly, and right of petition that other citizens enjoy, and as members of the academic community they are subject to the obligations which accrue to them by virtue of this membership.

STUDENT GRIEVANCE PROCEDURE

Definition

A grievance is an allegation by a student that an agent of the College has violated Board or College policies relating to students other than assignment of grades or other academic evaluation (see also Section 3: Review of Academic Standing).

How to File a Grievance

A grievance is to be submitted in writing to the Dean of Student Services or such other college official as the President may designate (hereinafter, the Dean of Student Services), within thirty (30) days of the date the grievant knew or reasonably should have known of the alleged violation. The written grievance shall specify the right claimed to have been violated and state briefly the underlying facts.

Procedure for Grievance Resolution

The Dean of Student Services shall investigate the grievance and **WITHIN THIRTY (30) DAYS FROM THE TIME THE GRIEVANCE WAS SUBMITTED**, recommend to the President a

disposition of the grievance, except as provided hereinafter:

- in the course of each investigation, the Dean of Student Services shall consult with the director responsible for the area of the college operations in which the grievance arose,
- in the case of a grievance alleging discrimination based on race, color, religious creed, sex, age, national origin, ancestry, present or past history of mental disorder, marital status, mental retardation or physical disability, prior conviction of a crime, political beliefs, veteran status, or sexual preference, the Dean of Student Services shall consult with the College's affirmative action person during the course of the investigation, and
- in the case of a grievance against a Dean, the grievance shall be filed with the President.

The President may accept or reject the recommendation, or direct such further investigation as he or she deems appropriate. The President shall notify the student of the final disposition of the grievance WITHIN FIFTEEN (15) DAYS OF RECEIVING THE RECOMMENDATION, EXCEPT FOR GOOD CAUSE OR AS PROVIDED BELOW.

Advisory Committee

The President may establish an advisory committee of students and staff which may be charged with the responsibility of making recommendations at either the level of the Dean or the President. The President may appoint and remove members of the committee. IF AN ADVISORY COMMITTEE IS APPOINTED, THE PRESIDENT SHALL ESTABLISH A REASONABLE TIME FRAME WITHIN WHICH THE COMMITTEE MUST MAKE RECOMMENDATIONS.

VIOLENCE PREVENTION AND RESPONSE POLICY AND PROCEDURES

In accordance with Governor's Executive Order No. 16 signed on August 4, 1999, which instituted a "zero tolerance" policy for workplace violence and in an effort to provide a safe environment for employees, students, visitors and guests while on the premises of the Community Colleges, the Board of Trustees of Community-Technical Colleges has adopted and expanded the application of the Governor's policy. Executive Order No. 16 is fully incorporated herein.

For the purposes of this policy, "violence" is defined as an overt act or threat of harm to a person or property, or any act that poses a substantial threat to the safety of any person or property. "Premises" is defined as any space owned or leased by the Community Colleges or any of its constituent units, including vehicles and any location where college or system business or activities are conducted. Conduct that may violate this policy includes, but is not limited to, the following:

- Intimidating, harassing or threatening behaviors
- Physical abuse, including hitting, slapping, poking, kicking, punching, grabbing, etc.
- Verbal abuse, including yelling, shouting, use of sexually, racially or ethnically charged epithets, etc.
- Vandalism
- Carrying or possessing weapons or dangerous instruments of any kind on Community College premises, unless properly authorized in accordance with the Board of Trustees and college policy governing weapons on campus
- Using such weapons
- Any other act that a reasonable person would consider to constitute a threat of violence, including oral or written statements, gestures or expressions that communicate a direct or indirect threat of physical harm.

Reporting Threats or Violent Acts

A person who feels that he or she has been subjected to threats or acts of violence as defined herein, or a person who witnesses such threats or acts, must report the incident to a supervisor, manager or to the Human Resources office. Supervisors and managers who receive such reports shall seek advice from the Human Resources office regarding investigating the incident and initiating appropriate action. **Serious incidents or serious threats of imminent danger to the safety of persons or property should immediately be reported to the Public Safety Department.**

Any individual who has applied for or obtained a protective or restraining order which lists the premises of the Community Colleges as protected areas must provide to the Human Resources office and to the Public Safety Department a copy of the petition and declaration used to seek the order, a copy of any temporary protective or restraining order that is granted, and a copy of any protective or restraining order that is made permanent. The sensitivity of the information requested is understood and colleges are responsible for treating such information in a manner that recognizes and respects the privacy of the reporting person.

Enforcement of this Policy

All reported incidents of violence will be taken seriously and will be dealt with appropriately, including prompt evaluation, investigation and response. An individual who makes a substantial threat of violence or commits an act of violence as defined in this policy shall be removed from the premises. Any weapon or dangerous instrument will be confiscated and turned over to appropriate law enforcement/public safety authorities. There is no reasonable expectation of privacy with respect to such items on college premises.

Violations of this policy, including knowingly providing a false report, or failing to cooperate fully with an investigation, may lead to disciplinary action up to and including dismissal from employment or expulsion from the college. Violations may also result in criminal penalties.

WEAPONS ON CAMPUS

(Excerpted from the Board of Trustees' Policy, 4.23, adopted May 18, 1992)

The use or possession of weapons (as defined in section 53-206 of the Connecticut General Statutes) is prohibited on college campuses or at college activities except as authorized by Board or College policies. Colleges are hereby authorized to develop policies that allow for specific exemptions to the extent permitted by law.

"Deadly weapon" means any weapon, whether loaded or unloaded, from which a shot may be discharged, or a switchblade knife, gravity knife, billy, blackjack, bludgeon, or metal knuckles. The definition of "deadly weapon" in this subdivision shall be deemed not to apply section 29-38 or 53-206. "Firearm" means any sawed-off shotgun, machine gun, rifle, shotgun, pistol, revolver or other weapon, whether loaded or unloaded from which a shot may be discharged.

CGS 53-206 defines a dangerous weapon as "any BB gun, black jack, metal or brass knuckles, or any dirk knife, or any switch knife, or any knife having an automatic spring release device by which a blade is released from the handle, having a blade of over one and one-half inches in length, or stiletto, or any knife the edged portion of the blade of which is four inches or more in length, any police baton or nightstick, martial arts weapon or electronic defense weapon, as defined in section 53a-3, or any other dangerous or deadly weapon or instrument. "Martial Arts Weapon" means a hunchaku, kama, kasari-fundo, octagon sal, tonfa or chinese star, "electronic defense weapon" means a weapon which by electronic impulse or current is capable immobilizing a person temporarily but is not capable of inflicting death or serious physical injury, including a stun gun or other conductive energy device.

"Dangerous instrument" means any instrument, article or substance

which under the circumstances in which it is used or attempted or threatened to be used, is capable of causing death or serious physical injury, and it includes a "vehicle" as that term is defined in this section and includes a dog that has been commanded to attack, except a dog owned by law enforcement agency of the state or any political subdivision thereof or of the federal government when such a dog is in the performance of its duties under the direct supervision, care and control of an assigned law enforcement officer.

NVCC Policy Exemptions

(Clarified by College President, July 1998)

The NVCC Policy follows the Board of Trustees' Policy, 4.23 with these specific exemptions that allow the following individuals to use or possess weapons under the specific conditions described:

1. On-duty peace officers with jurisdiction* on campus, in uniform with proper carry device (holster).
2. On-duty police officers with jurisdiction* on campus, in civilian clothing, with proper concealment from view.
 - **Jurisdiction is to be recognized as the officer being on official business and having the statutory right of carrying out that business on NVCC properties.*
3. The use or possession of a weapon may be approved to illustrate in an educational class, lecture, demonstration, or as part of an approved ceremony or program. This third exemption must have the prior written approval of the Dean of Academic Affairs, the Provost/Senior Dean of Administration and the Director of Public Safety. Forms to be used in seeking this approval are available in the Public Safety Department. The Public Safety Department will not take the responsibility of storing, caring for or handling personal weapons in any manner, except in cases of confiscation for a criminal offense or policy violation.

COMMUNICABLE DISEASES/AIDS POLICY

The Community-Technical College System reaffirms its commitment to provide a safe and healthy educational environment, safeguard the rights of individuals, and comply with state and federal anti-discrimination laws and regulations. Sound and compassionate legal, ethical, moral, and educational principles require that students and employees with AIDS, HIV infection, and other communicable diseases be accorded the same rights and assume the same responsibilities as all other members of the community-technical college community. It is recognized that the best method of allaying fears and promoting understanding is education: the dissemination of information based on fact and current scientific knowledge.

1. People with AIDS and other communicable diseases shall be accorded the same rights as all other students and employees. State and federal laws and regulations prohibit discrimination against and harassment of individuals solely because of disability. No individual shall be discriminated against in any college programs, services, or employment solely because of his or her status as AIDS- or HIV-infected or having any other communicable disease.
2. Each college shall provide information and educational programs and activities concerning AIDS and other communicable diseases for students and employees. Such information and programs shall rely on the most current knowledge about such diseases and shall focus on how such diseases are and are not transmitted, how they can be prevented, and the rights of persons with such diseases.
3. Each college president shall designate an individual responsible for coordination, delivery, and evaluation of the college's AIDS education program. A committee representative of the college community should be involved in formulating educational and information activities.
4. Restrictions shall not be placed on admission, programs,

services, or employment offered to an individual on the basis of a diagnosis of AIDS, HIV infection, or other communicable disease, except in individual cases when it has been medically determined that there is risk of infection or danger to others or in programs from which individuals with specific communicable diseases are excluded by law or regulation.

5. Colleges shall not require testing of students or employees for AIDS, HIV infection, or other communicable diseases for participation in employment, programs, or services of the college, except as required by law or regulation. Where possible, colleges shall maintain a listing of local referral sources for such testing and shall publish such listing with other educational information.
6. All student or employee information related to inquiries, testing, and disclosure of AIDS, HIV, or other infection status shall be treated confidentially as all other health records. All reasonable steps shall be taken to protect the identity of an individual with AIDS.
7. Students and employees involved in the direct delivery of health care services and those who might otherwise come in contact with blood and other body fluids (such as in science laboratories or allied health practica) shall at all times follow the guidelines regarding precautions to be taken in the handling of such fluids disseminated by the Department of Health Services (January 1987, provided as Appendix A) or other approved guidelines.
8. Violations of any part of this policy shall be dealt with under the appropriate disciplinary procedures for students or employees.
9. This policy shall be published in all college catalogs and student handbooks and shall be made available to all employees.

All questions about this policy may be directed to the Coordinator of College Health Services and Students with Disabilities.

COMPUTER RESOURCES POLICY

The Connecticut Community College (CCC) System provides information technology resources (IT resources) to faculty, staff and students for academic and administrative use. IT resources may also be available to members of the college community through college libraries and websites. This policy applies to all users of IT resources.

IT resources include, but are not limited to, computers and peripheral hardware, software, networks, databases, electronic communications and Internet connectivity. CCC IT resources are the property of the Board of Trustees. Use of such resources is a privilege and is subject to such IT policies, standards and procedures as may be promulgated from time to time.

IT resources shall be used solely for legitimate and authorized academic and administrative purposes, and in furtherance of CCC mission and goals. They shall not be used for personal purposes, including monetary gain. Use of IT resources may be monitored by the appropriate CCC authority to ensure proper and efficient usage, as well as to identify problems or to check for security violations.

Any unauthorized or illegitimate use of IT resources may subject the user to disciplinary action, up to and including dismissal or expulsion, as well as loss of computing privileges. Users must comply with all applicable state and federal laws and may be subject to criminal prosecution for violation thereof under state and federal laws.

The Chancellor is authorized to promulgate necessary and appropriate IT policies, standards and procedures, including but not limited to those affecting acceptable uses of IT resources, electronic communications and network security. Colleges shall ensure that users of IT resources are aware of all IT policies, standards and procedures, as appropriate.

Acceptable Use Policy

This Policy governs the acceptable use of Connecticut Community Colleges (CCC) Information Technology (IT) resources. These

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resources are a valuable asset to be used and managed responsibly to ensure their integrity, security, and availability for appropriate academic and administrative use.

Users of CCC IT resources are responsible for using those resources in accordance with CCC policies and the law. Use of CCC IT resources is a privilege that depends upon appropriate use of those resources. Individuals who violate CCC policy or the law regarding the use of IT resources are subject to loss of access to those resources as well as to CCC disciplinary and/or legal action.

In making acceptable use of CCC IT resources you must:

- Use resources solely for legitimate and authorized administrative and academic purposes.
- Protect your User ID and IT resources from unauthorized use. You are responsible for all activities on your User ID or that originate from IT resources under your control.
- Access only information that is your own, that is publicly available, or to which you have been given authorized access.
- Use only legal versions of copyrighted software in compliance with vendor license requirements.
- Use shared resources appropriately. (e.g. refrain from monopolizing systems, overloading networks with excessive data, degrading services, or wasting computer time, connect time, disk space, printer paper, manuals, or other resources).

In making acceptable use of CCC IT resources you must NOT:

- Use CCC IT resources to violate any CCC policy or state or federal law.
- Use another person's IT resource, User ID, password, files, or data.
- Have unauthorized access or breach any security measure including decoding passwords or accessing control information, or attempt to do any of the above.
- Engage in any activity that might be harmful to IT resources or to any information stored thereon, such as creating or propagating viruses, disrupting services, damaging files or making unauthorized modifications to computer data.
- Make or use illegal copies of copyrighted materials or software, store such copies on CCC IT resources, or transmit them over CCC networks.
- Harass or intimidate others or interfere with the ability of others to conduct CCC business.
- Directly or indirectly cause strain on IT resources such as downloading large files, unless prior authorization from the appropriate CCC authority is given.
- Use CCC IT resources for personal purposes including but not limited to, monetary gain, commercial or political purposes.
- Engage in any other activity that does not comply with the general principles presented above.

No Expectation of Privacy

There is no expectation of privacy in the use of CCC IT resources. CCC reserves the right to inspect, monitor, and disclose all IT resources including files, data, programs and electronic communications records without the consent of the holder of such records.

For the complete version of the Computer Resources policy for the CT Community Colleges, go to this weblink: <http://www.commnet.edu/it/policy>

POLICY ON RACISM AND ACTS OF INTOLERANCE

The Community Colleges have long been committed to providing

educational opportunities to all who seek and can benefit from them, as evidenced in the mission statements and policies concerning student rights, affirmative action, and equal opportunity. The board and the colleges recognize that an important part of providing opportunity is creating a welcoming environment in which all people are able to work and study together, regardless of their differentness. At the same time, colleges and universities have traditionally been at the cutting edge of protection of our most cherished freedoms, most notable freedom of speech and non-violent action, which protect even unpopular or divisive ideas and perspectives.

Such constitutionally-protected expression can contribute to an unwelcoming and even offensive social and educational environment for some individuals in the college community, particularly when it concerns race, religion, sex, sexual orientation, disability, national origin, or ethnicity, and the first amendment does not preclude colleges from taking affirmative steps to sensitize the college community to the effects of creating such a negative environment.

Therefore, the Community Colleges recognize that they have an obligation not only to punish proscribed actions, but also to provide programs which promote pluralism and diversity and encourage the college community to respect and appreciate the value and dignity of every person and his or her right to an atmosphere not only free of harassment, hostility, and violence but supportive of individual academic, personal, social, and professional growth.

Acts of racism or harassment directed against individuals or specific groups of individuals will not be tolerated and will be dealt with under the employee affirmative action grievance procedures and the student grievance and disciplinary procedures.

Each college will provide a comprehensive educational program designed to foster understanding of differentness and the value of cultural diversity. This will include plans to (1) promote pluralism, (2) educate the college community about appropriate and inappropriate behaviors to increase sensitivity and encourage acceptance, and (3) widely disseminate this policy statement to the entire college community.

SEXUAL HARASSMENT POLICY

It is the policy of Naugatuck Valley Community College to prohibit "sexual harassment." Sexual harassment is a form of sex discrimination which is illegal under state and federal law and is also prohibited by the Board of Trustees' Nondiscrimination Policy.

- Any unwelcome sexual advances or requests for sexual favors or any conduct of a sexual nature when (1) submission to such conduct is made either explicitly or implicitly a term or condition of an individual's employment or education, (2) submission to or rejection of such conduct by an individual is used as a basis for employment or academic decisions affecting the individual, or (3) such conduct has the purpose or effect of substantially interfering with an individual's work performance or creating an intimidating, hostile or offensive employment environment.

Also prohibited is any romantic/sexual liaison between a professional or classified staff member and a student for whom that staff member has a teaching, advisory or other supervisory responsibility.

Sexual harassment may be verbal, visual or physical. It may be overt or implicit and may, but need not, have tangible adverse effects on the victim's employment or learning experience. The perpetrator of sexual harassment, like the victim of such conduct, may be a man or a woman. It may involve individuals of the same or opposite sex. This college will not tolerate sexual harassment in any form. All employees shall be responsible and accountable for maintaining an environment free from sexual harassment. Any employee or agent found to have engaged in sexual harassment as defined above will be subject to serious disciplinary action up to and including dismissal.

Employees who feel that they have been sexually harassed have the right to file a complaint. Employees may report incidents of sexual harassment to the Dean of the area of the College in which the individual is involved, the College's Affirmative Action Officer, or to the President of the College. Ronald Clymer is the college's Affirmative Action Officer. His office is located in Kinney Hall, Room K705A, and he may be reached at 203-575-8110. Dr. Daisy Cocco De Filippis is the President of the College, her office is located in Kinney Hall, Room K703B, and her telephone number is 203-575-8044.

SEXUAL HARASSMENT:

(Excerpted from the Board of Trustees policy, via Employee Relations Memorandum 98-2. rev. 12/5/97.)

What is Sexual Harassment?

Sexual harassment is a form of sex discrimination which is illegal under state and federal law and is also prohibited by the Board of Trustees' Nondiscrimination Policy. The Board's policy recognizes that sexual harassment undermines the integrity of employer-employee and student-faculty-staff relationships and interferes with the right of all members of the College community to work and learn in an environment free from harassment. Such conduct will not be tolerated.

Sexual harassment may be described as: Any unwelcome sexual advance or request for sexual favors, or any conduct of a sexual nature when (1) submission to such conduct is made either explicitly or implicitly a term or condition of an individual's employment or education, (2) submission to or rejection of such conduct by an individual is used as a basis for employment or academic decisions affecting the individual, or (3) such conduct has the purpose or effect of substantially interfering with an individual's academic or work performance or creating an intimidating, hostile or offensive employment or educational environment.

Sexual harassment may be verbal, visual or physical. It may be overt or implicit and may, but need not, have tangible adverse effects on the victim's employment or learning experience.

Examples of conduct which may constitute sexual harassment include but are not limited to:

- sexual flirtation, touching, advances or propositions
- verbal abuse of a sexual nature
- pressure to engage in sexual activity
- graphic or suggestive comments about an individual's dress or appearance
- use of sexually degrading words to describe an individual
- display of sexually suggestive objects, pictures, or
- photographs
- sexual jokes
- stereotypic comments based upon gender
- threats, demands or suggestions that retention of one's employment or educational status is contingent upon toleration of or acquiescence to sexual advances

The perpetrator of sexual harassment, like the victim of such conduct, may be a man or a woman. Sexual harassment may involve individuals of the same or opposite sex and, in the College environment, may involve an employee and a student, an employee and another employee or a student and another student. Harassment in any of these relationships is a violation of the Board's policy.

Because of the power relationship between faculty and student, and between supervisor and subordinate employee, freedom of choice may be compromised in such relationships. Accordingly, this policy holds that where a faculty member or professional staff member has responsibility for a student through teaching, advising, supervision

or other obligation, romantic or sexual liaisons between such persons shall be deemed a violation of this policy.

It should be noted, additionally, that retaliation against a person for complaining or being associated in any way with the resolution of a complaint of sexual harassment also violates Board policy.

What To Do If You Are The Victim of Sexual Harassment

When an employee or student feels that he or she has been the victim of sexual harassment, he or she should report such incident(s) to a College official.

- Employees may report incidents of sexual harassment to the Dean of the area of the College in which the individual is involved, the College Affirmative Action Officer, or another College official who has been designated by the President as a recipient of such complaints.
- Students may report incidents of sexual harassment to the Dean of Students or to such other College official as the President may have designated. Nothing shall prevent students from speaking to a college counselor about their concerns. However, such communication is not a substitute for filing a complaint of sexual harassment with an appropriate College designee.
- A claim that an employee of a third party contractor has engaged in sexual harassment on College premises or in connection with the performance of the third party contract should be reported immediately either to the President or to another appropriate College official as set forth in this document. The President will ensure that appropriate follow-up action is taken.

Depending on the nature of the complaint and the desires of the complainant, the College official to whom the complaint has been made may attempt to resolve the complaint informally. Any informal resolution of a complaint must be approved by the College President. No person shall be forced to pursue informal avenues of resolution before filing a formal complaint of sexual harassment.

If informal resolution is not possible or appropriate, a written complaint should be filed in accordance with the existing Affirmative Action Grievance Procedure for Employees (see Board Policy 2.1.3) or Student Grievance Procedure for students (see Board Policy 5.2.2).

- For employees, a written complaint should be filed within fifteen (15) calendar days of the alleged harassment. This time frame may be extended by up to fifteen (15) additional calendar days if efforts at informal resolution have been made.
- For students, a written complaint should be filed within thirty (30) days of the date the grievant knew or should have known of the alleged harassment. However, a delay in filing a formal complaint will not be a reason for refusing to investigate such complaints. Although the ability to investigate may be compromised by delay, a written complaint will be treated in the manner prescribed by this policy if filed within 180 days of the date the student knew or should have known of the alleged harassment.

When a formal complaint of sexual harassment is received, the College will investigate it. The rights of all persons involved in the investigation shall be respected and every effort will be made to protect the confidentiality of both the alleged victim and the alleged harasser. Toward this end, only persons with a need to know shall be made privy to the complaint. However, complete anonymity cannot be assured, given the College's obligation under law to investigate and take appropriate action in all cases of sexual harassment.

All complaints of sexual harassment shall be taken seriously. It is expected that complaints will be made in good faith, however. Frivolous or vexatious complaints can cause irreparable damage to the reputation of an accused person, even though he or she is subsequently vindicated. Therefore, any person who files a false complaint of sexual harassment shall himself or herself be subject to disciplinary action, up to and including termination, if an employee, or expulsion, if a student.

In addition to invoking the available grievance procedure, an employee who believes he or she has been sexually harassed may file a complaint with the Connecticut Commission on Human Rights and Opportunities, 21 Grand Street, Hartford, CT 06106 and/or with the Equal Employment Opportunity Commission, One Congress Street, Boston, Massachusetts 02114, within 180 days of the date when the harassment occurred. A student who believes he or she has been sexually harassed may, in addition to the available grievance procedure, file a complaint with the Federal Office for Civil Rights, U.S. Department of Education (Region1), John W. McCormack Post Office and Courthouse, Room 222, Post Office Square, Boston, Massachusetts 02109.

Publication of Sexual Harassment Policy

This document shall be distributed to all members of the College community. Notice of the Board's policy against sexual harassment also shall be given to any independent contractor with whom a College has a business relationship, as a mandatory part of that contract.

Training

Training in the implementation of the Board's policy against sexual harassment and in sexual harassment prevention shall be provided for all supervisory employees, in accordance with the provisions of State law. Attendance at such training sessions shall be mandatory. In addition, awareness and sensitivity training for all employees is required and for students is strongly encouraged.

Informal concerns may be brought to the attention of the Dean of Students. Formal complaints of sexual harassment will be addressed according to our established Affirmative Action Student Grievance procedure contained in the Student Handbook, on the College website, in the Learning Resource Center and widely available from college Deans and Division Directors.

A student who believes he or she has been sexually harassed may, in addition to the available student grievance procedure, file a complaint with the Office for Civil Rights, U.S. Department of Education (Region1), John W. McCormack Post Office and Courthouse, Room 222, Post Office Square, Boston, Massachusetts 02109.

All complaints of sexual harassment shall be taken seriously.

SEXUAL ASSAULT RESOURCE TEAM (SART)

Naugatuck Valley Community College's Sexual Assault Resource Team (SART) is designed to provide a collaborative victim-centered team response to sexual assault. The mission of SART is to provide services that ensure a transition from victim to survivor for every individual whose life is impacted by sexual violence. The SART members can provide a survivor with referrals and general information regarding sexual assault.

The college works with Safe Haven of Greater Waterbury, which is our community-based sexual assault and domestic violence agency. They provide a wide range of free and confidential services including counseling, criminal court advocacy, referrals, support groups, assistance with restraining orders, Police accompaniment and advocacy, hospital accompaniment for sexual assault survivors and emergency shelter.

Should a survivor choose to file a police report, the College Public Safety Office, The Dean of Students, or Title IX Coordinator will assist the individual with the reporting process. We will strive to empower the survivor to make their own decisions by providing on and off campus resources, offer support as needed, and hold perpetrators accountable. The team includes a coordinator and designated individuals from the College and local community organizations including Safe Haven and the Waterbury Police Department. The Sexual Assault Resource Team is available to help anyone who reports a violation of the sexual assault policy. In cases of immediate danger or an emergency call 911. On campus contact the Public Safety office at (203) 575-8113 – ROUTINE CALLS (203) 575-8112 – EMERGENCY LINE.

For information or to report a sexual assault case, students may contact the Dean of Students at 203-575-8086, Title IX Coordinator

at 203-575-8043 or any other team member. Please visit: nv.edu/sart for team members' contact information and details of services.

ACADEMIC APPEALS POLICY

Good communication between faculty and students will make disputes between them infrequent, but if disagreements occur, it is the College's policy to provide a mechanism whereby a student may formally appeal faculty decisions. When a student uses the appeals procedure, all parties should endeavor to resolve the dispute amicably at the earliest possible stage.

Any student has the right to appeal a decision of a faculty, adjunct faculty, staff, program director, clinical coordinator, or employee of the college. Definition of an academic appeal is an allegation by a student that as to him or her, an employee of the college has violated federal or state laws and regulations, college or department policies, accreditation standards, or the faculty member's own stated policy relating to student's assignment of grades or other academic evaluation.

Types of Appeals

There are two types of Academic Appeals at Naugatuck Valley Community College:

- (A) General Academic Appeals are for appeals by students in any program or discipline.
- (B) Allied Health/Nursing Clinical Academic Appeals are for those appeals which deal specifically with clinical evaluation judgments.

Copies of the policy and forms may be obtained through the Academic Division Offices, from the Dean of Academic Affairs, or by contacting the Academic Appeals Committee Chairperson.

FINANCIAL DISCLOSURE POLICY

Individuals can request a copy of the college's most recent audited financial statement or a fair summary thereof by submitting a request in writing to the dean of administration.

SMOKING POLICY

Section 19a-342 of the General Statutes of Connecticut prohibits smoking in any building or portion of a building owned or leased and operated by the state or any political subdivision thereof. Smoking is also prohibited in any vehicle owned or leased by the state. Any person found guilty of smoking in violation of this statute shall have committed an infraction. Violations can result in an infraction being issued by a NVCC Public Safety Department police officer and a minimum fine of \$75.00.

Smoking outside campus buildings is restricted to "Designated Smoking Areas" and parking lots marked by signs to alert students, faculty, staff and campus visitors to the policy. Those areas so designated include only the following:

Gazebo Shelters on the Waterbury Campus

- Near the south entrance to Kinney Hall
- Outside Ekstrom Hall parking garage along parking lot D
- Outside the west entrance to Founders Hall

Outside at the Waterbury Campus

- Parking lot C
- Parking lot D
- Parking lot E
- Parking lot F
- Level 3 of the Plaza—south side of Fine Arts Center
- Building only as designated by signs and striping
- Outside the west entrance to the Fine Arts Center on the Plaza under the overhang
- Under the overhang of the area leading to the boiler room of the Core building on the ground level

190 Main Street, Danbury Danbury Campus

- Outdoor public areas

40 Violations (except in buildings) are not considered punitive according to present law and, therefore, are not subject to an infraction being issued by a NVCC Public Safety Department police officer. However, violations will be dealt with as workplace or student discipline matters. Compliance will be monitored by Public Safety, employee supervisors and student services staff. Faculty, staff and students are encouraged to direct smokers to the designated smoking areas and to report persistent violators to the appropriate authority.

USE OF CELLULAR PHONES POLICY

Students are hereby notified that cellular phones and beepers are allowed in class only if they are turned off or turned to a silent mode. Under no circumstances are telephones to be answered in class. Students who ignore this Policy may be asked to leave class. When there are extenuating circumstances that require that a student be available by phone or beeper, the student should speak to the instructor prior to class, so that together they can arrive at an agreement concerning the device.





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ACADEMIC STANDARDS

FEDERAL DEFINITION OF A CREDIT HOUR

Federal regulation define a credit hour as an amount of work represented in intended learning outcomes and verified by evidence of student achievement that is an institutional established equivalence that reasonably approximates not less than: (1) One hour of classroom or direct faculty instruction and a minimum of two hours of out of class student work each week for approximately 15 weeks for one semester or trimester hour of credit, or 10-12 weeks for one quarter hour of credit, or the equivalent amount of work over a different amount of time; or (2) At least an equivalent amount of work as described above for other academic activities as established by the institution including laboratory work, internships, practica, studio work, and other academic work leading to the award of credit.

ACADEMIC HONESTY AND PLAGIARISM

At NVCC we expect the highest standards of academic honesty. Academic dishonesty is prohibited in accordance with the Board of Regents (BOR) Proscribed Conduct Policy in Section 5.2.1 of the BOR Policy Manual. This policy prohibits cheating on examinations, unauthorized collaboration on assignments, unauthorized access to examinations or course materials, plagiarism, and other proscribed activities. Plagiarism is defined as the use of another's idea(s) or phrase(s) and representing that/those idea(s) as your own, either intentionally or unintentionally.

ACADEMIC LOAD

PART-TIME Students registered for eleven (11) or fewer credit hours in a semester are considered to be part-time students. Students have the responsibility to take the correct courses to meet graduation requirements in their academic programs, but students should seek the advice of their faculty advisor, counselor, or program coordinator. Students desiring to deviate from the recommended courses sequences must review such plans with their faculty advisor, counselor, or program coordinator. Financial aid students must contact this office to discuss deviations from their program of study.

FULL-TIME Students registered for twelve (12) or more credit hours in a semester are considered to be full-time students. Students have the responsibility to take the correct courses to meet graduation requirements in their academic programs, but students should seek the advice of their faculty advisor, counselor, or program coordinator. Students desiring to deviate from the recommended course sequences must review such plans with their faculty advisor, counselor, or program coordinator.

The average full-time student carries five courses (15-16 credits), depending upon program of study and/or academic preparation. Students who wish to carry more than sixteen credits, which is the maximum load allowed, must apply to the Dean of Academic Affairs for special permission prior to registration. The initial program of study for all students is developed at the time of entry to the College under the direction of the Director of the Center for Academic Planning and Student Success (CAPSS).

COURSE CHANGES

During the first week of each semester, students may Add/Swap courses. Students who wish to make course or schedule changes may do so without penalty on a space-available basis through the Office of the Registrar.

No student will be allowed to enter a course after the first week of classes without permission of the Division Director.

CLASS ATTENDANCE

Classroom attendance is an integral part of the college experience. The faculty of the College believes that regular class attendance is necessary for a student to derive the maximum benefit from the learning experience and the overall value of the classroom instruction. For absences due to extenuating circumstances, it is the responsibility of the student to contact the instructor. Specific attendance

and grading policies will be included in the syllabus for each class.

There are some degree and certificate programs which have special attendance policies which must be satisfied due to licensing requirements. Students should refer to the program handbooks for these specific requirements.

MAKE-UP WORK

Academic work missed during class absences should be discussed with the individual instructor immediately upon the student's return to class. It is the student's responsibility to seek out the instructor in this case during office hours or at a mutually convenient time. Specific make-up policies are at the discretion of the instructor.

GRADING SYSTEM

Credit Courses

For the purpose of computing numerical credit point averages, grades are evaluated as follows for each semester hour of credit:

<i>Numeric Grade</i>	<i>Acceptable Letter Grade Range to be used by the Instructor</i>	<i>Description</i>
90-100	A- to A	Excellent
80-89	B-, B, B+	Above Average
70-79	C-, C, C+	Average
60-69	D-, D, D+	Below Average
Below 60	F	Failing

The symbols of "AU", "I", "M", "P", "TR", "W", are not included in the GPA.

Developmental grades do not count in the GPA. These grades will appear on the record with the # to designate their status. Note: since they do not count in the GPA, they will not contribute to academic warning, probation, or suspension.

Combined Academic Standing

The earned grades (GPA) will generate a status of Good Standing, Written Warning, GPA Probation, or Suspension. The record of credits completed is called Progress Evaluation, and will generate status of Good Standing or Progress Probation. The Combined Academic Standing (CAST) will include both of these evaluations.

Administrative Transcript Notations

The College uses a number of administrative transcript notations, apart from the grading system, to describe various situations. They are as follows:

- **Incomplete (I) - No Quality Points**

At the discretion of the instructor, the notation "I" may be assigned if a student, for extenuating circumstances, has not completed all course requirements. The faculty member who assigns an "I" (incomplete) shall file a system report form. This notation will not be allowed for excessive absences. Usually, an "I" would be changed to a letter grade by the end of the next semester; however, the instructor has the option of establishing the completion date. If a grade change is not submitted to the Office of the Registrar by the instructor by the end of the semester following that in which the "I" was assigned, the "I" will be converted to a "F".

- **Withdrawal (W) - Student Initiated No Quality Points**

The College recognizes the potential for a student to withdraw from a course or to withdraw from college. Students have the right to formally leave a course or the College, and they also have the right to receive counseling and assistance in order to maintain enrollment in courses. Students are advised that course withdrawal may alter progress toward program completion. Students are strongly encouraged to discuss their decision with the instructor and their counselor or advisor

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when contemplating a decision to withdraw.

- **Withdrawal from Course(s)**

It is strongly recommended that students considering withdrawal from a course seek the advice of the instructor and a counselor or advisor. Students will be permitted to withdraw with a "W" notation no later than two weeks preceding the last Monday-Friday regularly scheduled class day. The last date for withdrawal will be published and announced.

Withdrawals (with signature) can be made:

- in person at the Office of the Registrar K516
- by mail: NVCC Office of the Registrar K516
750 Chase Parkway
Waterbury, CT 06708
- Fax: (203) 575-8085
- On-line: <http://mycommnet.edu>

Requests must be received by the deadline within the withdrawal period (i.e. requests received by midnight prior to the deadline will be honored).

Note: A withdrawal from a course(s) may jeopardize your financial aid status, car insurance coverage, health insurance coverage and other benefits.

Note: A student may not obtain a transcript notation of "W" if there exists substantial reason to believe that the student has engaged in academic misconduct in the course. A transcript notation of "W" will only be permitted for such students when the final resolution results in finding the student did not commit academic misconduct in the course.

- **Maintaining Progress (M)**

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.

- **Audit (AU) - No Quality Points**

See "Auditing Courses".

- **Pass (P)**

An administrative transcript notation for successful completion of courses taken on a pass/fail basis. Students failing will receive a grade of "F".

Transfer (TR)

An administrative transcript notation in lieu of grades for courses accepted for credit from other colleges and universities.

Non-credit Courses

Non-credit classes, seminars, workshops and programs all meet The Non-Credit Program Development Quality Standards. Certification coursework and programs meet or exceed industry or professional standards. Continuing Education Units (CEU's) are awarded based on recognized international, national, or state standards. Letter or number grades are assigned by college instructors and trainers based on demonstrated knowledge attainment and/or skill achievement.

GRADE CHANGE POLICY

The faculty member initiates the grade change process. Grade changes cannot be submitted later than one semester following the standard semester or session in which a course was originally graded. This policy is not intended to supersede the academic grievance policy or the policy governing Incompletes. A grade can only be changed if it was miscalculated, if it was erroneously reported by the faculty member, or if it was an Incomplete that needs to be changed. Students will receive notification of the grade change from the Office of the Registrar.

AUDITING COURSES

Students who do not wish to earn course credit may be permitted to audit by notifying the Office of the Registrar of their intent at the time of registration within the first four weeks of the start of the course. Students must pay the regular tuition and college fees for each course audited.

The privileges of an auditor in a course are specifically limited to attending and listening. The auditor assumes no obligations to do any of the work of the course and is not expected to take any of the time of the instructor. The auditor does not submit any work and is not eligible to take any tests or examinations, nor to receive grades on all or any part of the course. Audited course(s) will be shown on the student's transcript with the symbol "AU" in the grade column and will not carry any credit hours or quality points. An audited course does not earn any credit toward graduation.

INDEPENDENT STUDY

Faculty members in some subject areas permit qualified students to apply for Independent Study for credit and a grade when it has been proven that the student has the necessary background and qualifications to pursue this type of instruction.

The established syllabus in each independent course requires the student propose in writing the specific objectives and procedures of the independent study project. No more than one independent study may be taken in an academic year.

Before registration, a Request for Independent Study form (available from an academic division as well as the Office of the Registrar, Kinney Hall, Room K516) must be filled in with appropriate documentation and approved by the academic dean, division director and the faculty member with whom the student will work. The proposal and the agreement become part of the student's permanent record. Student must be matriculated in a degree or certificate program to be eligible for independent study.

BOR POLICY ON REPEATING COURSES

Naugatuck Valley Community College has policies regarding repeating courses multiple times. The Board of Regents for the Connecticut State Colleges and Universities policy states:

"No course may be repeated more than twice. The highest grade received will be used in calculating the student's academic average. This does not apply to those courses that are designed to be repeated for additional credit.* College standards will be included in appropriate college publications and communications. These standards shall not be applied retroactively to the academic record of any student. A request for waiver of these standards shall be based on special circumstances and be approved by the college president, and be reported to the chancellor."

*Courses such as music lessons, chorus, physical education, and wine and viticulture.

1. After the freeze date the Registrar provides the Dean of Academic Affairs with a list of students who are taking a course for the 3rd, the 4th, or more times.
2. Students who are taking a course for the 3rd time are sent a warning letter from the Dean of Academic Affairs.
3. Students who are taking a course for the 4th time are sent a letter from the Dean of Academic Affairs and asked to make an appointment to discuss a waiver. The Dean's office will contact a department chair, coordinator, or division leader to assist the student with tutoring, etc. so that the student will not repeat the course for an additional time.

SATISFACTORY ACADEMIC PROGRESS

Satisfactory completion of fifty percent of the credits attempted (this phrase means actual continued enrollment beyond the add/drop period) will be the minimum standard of good standing. Students receiving Federal Title IV financial aid must successfully complete two-thirds (66.66% earned credits/attempted credits) of the attempted credits.

ACADEMIC STANDARDS

Students who have completed 11 or fewer credits whose Cumulative Grade Point Average (CGPA) falls below 1.5 will be given a written warning. Students who have completed between 12 and 30 credits inclusive whose CGPA falls below 1.7, and those who have completed 31 or more credits whose CGPA falls below 2.0, will be given a written notice that they are placed on academic probation.

ACADEMIC PROBATION

Students placed on academic probation are required to seek counseling and will have a restricted credit load. They will be required to see a counselor or advisor in the CAPSS prior to registering for the next semester.

Students on academic probation who fail to attain the required CGPA as shown will be notified in writing that they are suspended for one semester.

After a period of suspension, a student may be reinstated as a probationary student. Students are required to meet with a counselor to complete an Academic Suspension Appeal as part of the reinstatement process.

A student may request a review of academic status by the Dean of Academic Affairs. Students are required to seek counseling and reduce their course load before returning to the college.

Veterans whose CGPA falls below the required 2.0 GPA will be placed on academic probation for one semester. If, at the end of the semester, the veteran has not raised his/her GPA to the required 2.0, veteran benefits will be terminated and the Veterans Administration will be notified. Once the veteran has returned to good academic standing, his/her benefits will be reinstated.

ACADEMIC ADVISING

In addition to the Center for Academic Planning and Student Success, the College has a faculty advising system. Students who have formally enrolled in a degree program are required to have academic advising. First semester students must meet with an assigned counselor, advisor or faculty advisor prior to registering for the following semester.

ACADEMIC HONORS

Honor societies representing several curriculum disciplines exist to recognize specific academic achievement. Student chapters of several professional societies are also available. The honors policy at Naugatuck Valley Community College is as follows:

Semester Honors:

- Dean's List - A 3.4 grade point average for the semester. Full-time students who are matriculated in a certificate or degree program and who successfully complete 12 or more credits of work in a semester with a grade point average of 3.4 or higher shall be recognized by having their names placed on a Dean's List.
- Part-time students who are matriculated in a certificate or degree program are also eligible for such recognition when they have completed 12 or more credits of work with a cumulative grade point average of 3.4 or higher. They may be subsequently recognized at the completion of an additional 12 or more credits of work with a cumulative grade point average of 3.4 or higher, and at successive intervals of 12 credits.
- A course Withdrawal or Incomplete shall make the student ineligible for Dean's List recognition that semester. Upon completion of the Incomplete, the student may be recognized retroactively.
- Students who are in a probationary status are not eligible for Dean's List recognition, even if their cumulative grade point average might otherwise make them eligible.

Phi Theta Kappa - Students with a semester grade point average of 3.50 or higher.

Alpha Beta Gamma - Business Major students with a cumulative grade point average of 3.0 or higher and completion of at least 15 College credits.

Alpha Beta Gamma

Alpha Beta Gamma is an international business honor society established in 1970 to recognize and encourage scholarship among college students in business curricula at community, junior and technical colleges. The Society has over 35,000 members from 140 member colleges. To achieve this goal, Alpha Beta Gamma provides an opportunity for the development of leadership and service, an intellectual climate for the exchange of ideas and ideals, lively fellowship for business scholars, and the stimulation of interest in continuing academic excellence. The lives of members, chapter advisors and support administrators have been enriched by the Alpha Beta Gamma experience. Alpha Beta Gamma exists to honor the superior student in business programs.

Lambda Epsilon Chi (LEX)

LEX is a national Legal Assistant/Paralegal Honor Society. Students who have superior academic performance and complete two-thirds of the program requirements are eligible to be inducted.

Phi Theta Kappa

Phi Theta Kappa is a nationwide honor society for community college students. The criteria for invitation are a 3.50 or above grade point average with at least 24 completed credits, including all majors. The achievements and future plans of its members are focused to promote continued honors behavior and to maximize their educational attainment. These goals are accomplished by numerous articulation and transfer scholarships with many colleges and universities. A Faculty Honors Advisor offers guidance and assistance to the Phi Theta Kappa members who represent approximately the top three percent of the student body. Membership is a lifetime honor.

The Honors Institute

The Honors Institute will enable students who have demonstrated significant academic achievement to participate a rigorous course of study in order to advance their knowledge and research skills. Graduates that meet the course work will receive an Honors designation on their transcript. Full time and part time students may apply. Applications are accepted until October 1 for the Spring semester, and April 1 for the Fall semester. In order to be admitted, students must have obtained at least 12 college credits (NVCC or transfer) with a cumulative GPA of at least 3.4, and must have obtained a letter of recommendation from a faculty member.

To graduate with Honors Distinction:

- A student must complete nine credits of Honors course work:
- Two honors by contract courses
- One capstone "Special Topics" course
- Attain a minimum 3.4 G.P.A. in each course
- Attain a minimum 3.4 GPA in the degree program
- Each HBC course will conclude with a student presentation.

The Honors Institute affords students direct access to faculty mentoring, more independent study opportunities, and early entrance into Phi Theta Kappa Honor Society. Success in the Honors Institute increases transfer opportunities, gains student recognition at the Honors Showcase and commencement, and includes honor status on the student's transcript.

The President's Circle

Membership into the President's Circle represents the highest honor a student may receive while matriculating at the college. These students represent a select group of outstanding achievers who serve as the college's student ambassadors. Circle ambassadors have the opportunity to attend major college, community and government events with the President and/or her cabinet, and lend voice to their experiences as NVCC students. They are given platforms

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to directly engage with community leaders, officials, alumni, and friends. Overall, membership represents an opportunity for these students to make connections, build networks, and further their roles as active citizens and leaders. Following two semesters of service, each Circle ambassador receives a scholarship to help defray the cost of textbooks (whether at NVCC or their 4-year transfer institution), as well as a letter of recommendation from the President of NVCC. Ambassadors are required to attend events, class schedules permitting, throughout their term of ambassadorship. They are expected to conduct themselves ethically, morally, and academically in a manner befitting a representative of the college.

Eligibility: Students should have completed at least 12 credits at NVCC at the time of application with a minimum 3.40 cumulative GPA and will have completed at least 2 semesters before their term as Ambassadors begins. Students must be enrolled in a credit program. Selection is based upon academic achievement and potential; work, leadership, and service experiences both on and off the campus; enthusiasm for NVCC; ability to articulate future plans and goals; and overall communication skills. The application includes 4 components:

- Personal Statement
 - Transcript (3.40 cumulative GPA)
 - Resume and a list of on-campus leadership and work experience, extracurricular activities, and volunteer work
 - Letter of recommendation from an NVCC faculty member
- For information, contact the Academic Center for Excellence: Ekstrom Hall Room E500, ace@nvcc.commnet.edu, (203) 596-8717.

GRADUATION HONORS

Students with exemplary academic performance shall be recognized at graduation with the following designations, either in Latin or English, as the college may choose:

- Summa Cum Laude/Highest Honors for students with a 3.9 – 4.0 grade point average
- Magna Cum Laude/High Honors for students with a 3.7 – 3.89 grade point average
- Cum Laude/Honors for students with a 3.4 – 3.69 grade point average

Students with an Incomplete may become eligible retroactively for graduation honors upon completion of the course requirements, and recognition shall appear on the transcript, provided that the student has earned the required grade point average. Grades received for developmental courses may be used to determine eligibility for semester honors. However, they cannot be used to determine eligibility for graduation honors.

Presidential Medal of Honor

Established in 2012, the Presidential Medal of Honor is a prestigious award presented by the President of Naugatuck Valley Community College to students, faculty, staff, administrators and community members who have distinguished themselves by their significant contribution to the mission accomplishment and program outcomes of our students and our College. The Presidential Medal of Honor will be presented each year at commencement by the President.

Criteria For Students:

The recipient has met eligibility criteria for graduation from an associate degree program and had a 4.0 G.P.A. in August for a September graduation; in December for a January graduation; in May for a May graduation. The student has evidenced good moral character and demonstrated personal commitment through service to the college community, the larger community we serve, or both.

To Graduate with Honors Distinction:

- A student must complete nine credits of Honors course work:
- Two honors by contract courses
- One capstone “Special Topics” course

- Attain a minimum 3.4 G.P.A. in each course
- Attain a minimum 3.4 GPA in the degree program
- Each HBC course will conclude with a student presentation.

GRADUATION REQUIREMENTS

Degree/Certificate Eligible Students

The College awards the degrees of Associate in Arts and Associate in Science. To be eligible for an associate degree, the student must have fulfilled all of the following:

- been accepted into a degree program at the College.
- satisfactorily completed the courses required in the curriculum for the degree. In addition to the degree requirements, students are strongly urged to take advantage of courses available which will broaden their personal and professional lives.
- completed a minimum of 25 percent of all academic requirements for the degree at Naugatuck Valley Community College.
- earned a minimum cumulative grade point average of 2.0.
- been recommended for graduation by a vote of the Professional Staff of the College or an affirmative recommendation from the Division Director, Department Chairperson or the Program Coordinator.
- complete the graduation application which may be obtained from the Office of the Registrar or online at <http://my.commnet.edu> and submit by December 1 for January conferral or March 15 for May, or July 1 for August conferral. There is no application fee.
- paid to the College all bills incurred, and must have returned or paid for all materials loaned by the College, including library books, audiovisual and athletic equipment.

DEVELOPMENTAL COURSES

Credit Courses Which Do Not Apply to Electives or the Degree

The following credit courses do not satisfy the elective or degree requirements in any program except where specifically listed.

CWE-H100 - Portfolio Preparation
ENG*H096
ESL*H012, 013, 015, 017, 022, 025
MAT*H092, 094, 095
HLT*H093

Earning a Second Degree

A student who already holds an academic degree may earn a second degree in a different curriculum at a community college. Such a student shall be treated similarly to a transfer student with respect to the minimum number of credits he or she must take for the second degree. This will require that a student meet all program requirements and earn at least 25 percent of the minimum requirements for the new curriculum at the college through which the second degree is to be conferred.

- A student may earn two degrees simultaneously at a community college by fulfilling all requirements stated above.
- Requests for additional degrees beyond the second require prior approval from the academic dean. Students who receive approval must then complete all program requirements, including earning at least 25 percent of the minimum requirements for the new curriculum at the college through which the degree is to be conferred.
- Completion of the requirements of an additional program option does not constitute a different degree.

Certificate Requirements

Students who complete the requirements for a credit certificate are expected to follow the same procedures described for degree students.

Individuals completing non-credit certification programs (e.g.,

ACADEMIC SERVICES

Certified Nurse Aide, Emergency Medical Technician) should check with the Continuing Education Department to verify their completion of, and compliance with, all state-mandated regulations.

PARTICIPATION IN COMMENCEMENT EXERCISES

Students who, in order to fulfill their degree program requirements, need to complete no more than two courses in the Summer Session following the spring semester may participate in Commencement Exercises; however, such students will not be considered as having graduated until all graduation requirements are completed. Students must have met all criteria stated in the section on *GRADUATION REQUIREMENTS*.

The December grade point average will be considered for honors recognition for the May commencement. If the grade point average changes when the grades for spring courses are recorded and honor status is affected, the official college record will reflect the changes.

POLICY CHANGES

Naugatuck Valley Community College reserves the right to change requirements, courses, prerequisites, regulations, tuition, fees and other policies without prior notice. Waivers of these policies, due to extenuating circumstances, may be made by the President of the College upon written request.

LIBRARY SERVICES

The Max R. Traurig Learning Resources Center Library is a full-service academic library fulfilling the needs of Naugatuck Valley Community College students, faculty and staff, as well as residents of Waterbury and its surrounding communities. The library's policies and practices are developed using accepted industry standards current in academic and library literature. For more about our mission, goals, services, and policies, and all contact information, please visit nv.edu/library. The library is centrally located on the Waterbury campus in the L building, between Ekstrom Hall and the Student Center, with the main entrance located at L-523. Level 5 services include Circulation, Reserves, and Reference, and ready access to computers, printers, copiers and scanners, a study area, and books. The library may also be accessed from Level 4, at L-410. Level 4 areas include current and back issues of periodicals, the library's Electronic Classroom, computers with printers, quiet and group study areas, DVD, VHS and CD collections, and staff offices. More books are located on the Mezzanine level, between Levels 4 and 5.

The Max R. Traurig Library offers books, journals, DVD and VHS films, and CDs as well as items such as USBs, laptops, guitars, and calculators. Check <http://nvcc.libguides.com/policies/circ> for more information on borrowing.

Digital resources such as journal databases, streaming media, and ebooks are available on campus and via myCommNet. Off campus use requires a current student, staff, or faculty myCommNet username and password.

An **Electronic Classroom (EC)** equipped with 32 full-service computer workstations and a teaching console with projection system is used throughout the academic semester to conduct Library Instruction classes and workshops. When not reserved for classes, the computers in the EC may be used for academic purposes on a walk-in basis.

The Level 4 group study area includes a **Collaboration Studio**, where up to 6 people can simultaneously use laptops or notebook style computers at a Mediascape to work together on group projects. Please note: Laptops are available to check out at the Circulation Desk in L523.

Borrowing privileges are extended to NVCC students, faculty, and staff. All other Connecticut residents may also borrow most materials from the NVCC library at no cost. To register for borrowing privileges, bring proof of identification to the Circulation Desk in L523.

Students, faculty, and staff at NVCC can ask for items from other libraries to be delivered to NVCC for check-out, through NVCC's participation in Connecticut's InterLibrary Loan (ILL) program.

Connecticut residents with a public library card from their hometown library may borrow materials from other public libraries. In addition, the following libraries are located in the NVCC community and can be used by NVCC students. Please visit the library's website, or phone ahead, for hours, directions, and library use policies. Be prepared with proof of current NVCC registration, and coins for photocopying in case borrowing of materials is limited.

Library Services to Patrons with Disabilities Assistive technology is available for blind and low vision users, for use in the library and classroom. Library staff are available on request to provide accommodation for patrons with limited mobility.

Connecticut Judicial Branch Law Library at Waterbury 203-591-3338 <http://www.jud.state.ct.us/lawlib>

Danbury Public Library 203-797-4505 <http://danburylibrary.org/>

Danbury Hospital Library 203-797-7419 <http://www.danburyhospital.org>

Post University's Traurig Library 203-596-4560 <http://www.post.edu>

Silas Bronson Library (Waterbury's public library) 203-574-8225 <http://www.bronsonlibrary.org>

University of Connecticut Waterbury Campus Library 203-236-9900 <http://lib.uconn.edu/libraries/waterbury-campus-library>

Saint Mary's Hospital Library 203-709-6408 <http://www.stmh.org/>

Waterbury Hospital Health Center Library 203-573-6136 <http://www.waterburyhospital.org>

Western Connecticut State Libraries Haas Library 203-837-9100 Young Library 203-837-9139 <http://library.wcsu.edu/>

ACADEMIC CENTER FOR EXCELLENCE

Located in Ekstrom 500, the Academic Center for Excellence (ACE) is dedicated to helping Naugatuck Valley Community College students succeed and achieve academic success. The ACE is a complementary campus resource providing tutorial services in various subjects including math, writing, science, ESL, computer software applications, and accounting. Students can walk in and receive help from one of our professional or peer tutors who focus on students and their success. In addition, the ACE is where students can come for individual and group study, research assistance, exam proctoring, college success tip sheets, academic workshops and ACCUPLACER® preparation assistance. There are more than 45 computers in the ACE for student use. Students who frequently visit the ACE improve their overall grades and successfully complete their courses at higher rates than students who do not take advantage of the ACE.

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What You Can Expect from an ACE Tutor

- Encouragement
- Motivation
- Respect for Your Learning Style
- Tips on How to Study for a Test
- Assistance with Understanding Course Content
- Patience

What ACE Tutors Expect from You

- To attend class on a regular basis
- To have specific questions
- To bring information regarding course content and assignment details
- Use tutoring as assistance is needed, not just before a test

Math Tutoring: The math lab offers a quiet, convenient environment for students to work on their math homework and projects. A collection of textbooks, solution manuals and calculators are available for use and tutors are available to assist students through the process of problem solving. All computers in the ACE are equipped with interactive computer tutorials. We also offer access to MyMathLab®, a comprehensive software system designed to help students with basic mathematics through calculus with internet-based assignments and tests.

Writing Center: In the writing center, students can expect to receive assistance with a written assignment with the tutor paying particular attention to thesis development, argument, and organization. Our tutors help the student identify writing problems and develop possible strategies to correct them. The tutor helps in the brainstorming process when the student is just beginning a writing project. The tutor helps the student understand the purpose of an assignment. In the case of grammar or punctuation problems, the tutor reviews the rules and makes sure the student understands the details. The student is ultimately responsible for completing the assignment and correcting his or her work. Students can usually expect a twenty minute session with a writing tutor and they should limit their sessions to two or three per assignment.

Science Exploration Zone: In the science exploration zone, students can receive science tutorial assistance in chemistry, anatomy and physiology, biology, and physics. The zone is equipped with computers, complete with science simulation software, microscopes, videos and textbooks. Students have use of anatomical models including full-body skeletons, skulls, and vertebrae sets to aid learning and bring material to life.

Computer Assistance: Whether assistance is needed with designing a PowerPoint presentation, developing an Excel spreadsheet or learning the latest Microsoft Office version, tutors are available. Our peer tutors are experienced and eager to help students.

Placement Testing Preparation: Students are encouraged to review basic concepts in grammar, reading, arithmetic, trigonometry and algebra before taking the placement test, especially if they have been away from school for more than a year. The ACE offers a number of resources to help students prepare, including study guides, practice tests and tutors available to help strengthen skills.

Contact (203) 596-8717 if you have any questions, or utilize our website at: nv.edu/ace or follow us on Facebook.

PROGRAM ADMINISTRATION

The academic programs of the College are administered by instructional divisions. It is important for students to be aware of the division in which their program of study resides. The following are the instructional divisions and the courses or program designations for which they are responsible:

CREDIT PROGRAMS

Allied Health/Nursing/Physical Education: Nursing, Physical Education, Physical Therapist Assistant, Radiologic Technology, Respiratory Care.

Business: Accounting, Automotive Technician, Aviation Science, Business Administration - Business Computer Applications, Business Finance, Computer Information Systems Technology, Computer Networking, Fire Technology and Administration, Hospitality Management/Hotel Management, Legal Assistant/Paralegal, Management, Marketing, and Medical Insurance Specialist.

Liberal Arts and Behavioral/Social Sciences: Anthropology, Art, Behavioral Science, Child Development Center, Child and Family Services, Communications, Connecticut State Legislative Internship Program, Criminal Justice/Public Safety, Dance, Digital Arts Technology, Disabilities/Mental Health, Drug and Alcohol Rehabilitation Counselor, Early Childhood Education, English, English as a Second Language, Geography, Gerontology, History, Humanities, Human Services/Pre-Social Work, Modern Languages, Music, Philosophy, Photography Political Science, Psychology, Sociology, Study Abroad and Theater Arts.

Science, Technology, Engineering & Mathematics: Astronomy, Automated Manufacturing Engineering Technology, Biological Sciences, Chemistry, Computer-Aided Drafting/Design, Electronic Engineering Technology, Engineering Science, Engineering Technology, Environmental Science, Geology, Horticulture, Mathematics, Mechanical Engineering Technology, Meteorology, Physics and Technology Studies.

NON-CREDIT/LIFELONG LEARNING PROGRAMS

The mission of the Naugatuck Valley Community College Community and Economic Development Unit is to support community and economic development by affecting positive change in our communities. We collaborate with community partners to respond actively to the changing workforce needs of our region. We empower individuals and businesses through quality education and training. We enrich lives with lifelong learning, personal, and professional development opportunities. Some of these opportunities include:

Bartending
Basic Life Support & AED
Boating Safety
Bookkeeper
Business
Central Sterile Processing Technician
Certified Nurse's Aide (CNA)
Certified Wedding Planner
Events Management
Grant Writing

Hospitality
Human Services Assistant
Manufacturing
Medical Administrative Assistant
Medical Coding and Billing Specialist
Motorcycle Rider Education
MS Office Essentials
OSHA 10 General
Patient Care Technician
Personal Fitness Trainer
Pharmacy Technician

Phlebotomy Technician
QuickBooks
Real Estate
Security Officer
Wedding Planner
Welding – SMAW (STICK)
Welding – GMAW (MIG)
Welding – GTAW (TIG)
Welding – FCAW (Flux-core)



50 PROGRAMS OF STUDY

Naugatuck Valley Community College offers associate degrees credit certificates and non-credit certificate programs. Curricular patterns are designed to implement the overall general and specific objectives of the College and lead to the degrees of:

Associate in Arts (A.A.) Associate in Science (A.S.)

Degrees

- Accounting (A.S.) – HA03
- Automotive Technician (A.S.) – HA24
- Automotive Technician Management Option (A.S.) – HC23
- Aviation Science (A.S.) – HB97*
- Aviation Science Management Option (A.S.) – HC21
- Behavioral Science (A.S.) – HC20
- Business Administration - Business Computer Applications (A.S.) – HA54
- Business Finance (A.S.) – HA57
- Business Management (A.S.) – HA68
- Computer Information Systems Technology (A.S.) – HA76
- Criminal Justice/Public Safety (A.S.) – HB04
- Criminal Justice - Computer Crime Deterrence Option (A.S.) – HC16*
- Criminal Justice - Corrections Option (A.S.) – HC13
- Criminal Justice - Forensics Option (A.S.) – HC17
- Criminal Justice - Law Enforcement Option (A.S.) – HC14
- Criminal Justice - Security Option (A.S.) – HC15
- Cybersecurity (A.S.) – HA35
- Digital Arts Technology – Audio/Video Option (A.S.) - HC25
- Digital Arts Technology – Graphics/Animation Option (A.S.) - HC26
- Digital Arts Technology – Multimedia/Web Authoring Option (A.S.) - HC27
- Drug and Alcohol Recovery Counselor (A.S.) – HF10
- Early Childhood Education (A.S.) – HB93
- Electronic Engineering Technology (A.S.) – HB11
- Engineering Science (A.S.) – HB12
- Engineering Technology (A.S.) – HB83
- Engineering Technology - Automated Manufacturing (A.S.) – HB84
- Engineering Technology - Computer-Aided Drafting/Design (A.S.) – HB86
- Engineering Technology - Mechanical (A.S.) – HB85
- Environmental Science (A.S.) – HB87
- Fire Technology and Administration (A.S.) – HF05
- General Studies (A.S.) – HB25
- Horticulture (A.S.) – HB37
- Hospitality Management - Foodservice Management (A.S.) – HB16
- Hospitality Management - Hotel Management (A.S.) – HB94
- Human Services / Pre-Social Work (A.S.) – HA06
- Legal Assistant/Paralegal (A.S.) – HB56
- Liberal Arts and Sciences (A.A.) – HB57
- Marketing (A.S.) – HB61
- Mathematics & Science (A.A.) - HB44
- Mathematics & Science - Chemistry (A.A.) - HC12
- Nursing (A.S.) – HF30
- Physical Therapist Assistant (A.S.) – HB71
- Radiologic Technology (A.S.) – HB73
- Respiratory Care (A.S.) – HB74
- Technology Studies (A.S.) – HF11
- Technology Studies –
 Engineering Technology Option (A.S.) – HF12
- Technology Studies –
 Lean Manufacturing and Supply Chain Management (A.S.) – HF20
- Visual and Performing Arts – Visual Art (A.A.) – HC28
- Visual and Performing Arts – Dance (A.A.) – HC29
- Visual and Performing Arts – Digital Design (A.A.) – HC33
- Visual and Performing Arts – Music (A.A.) – HC31
- Visual and Performing Arts – Theater Arts (A.A.) – HC32

Certificates

- Accounting – HJ05
- Administrative Support – HJ81
- Advanced CADD Modeling – HJ03
- Advanced Engine Performance – HJ12
- Advanced English Proficiency – HJ80
- Advanced Manufacturing Machine Technology – HK60
- Applied Behavior Analysis – HJ88
- Athletic Coaching – HJ22
- Audio/Video Production – HK01
- Automotive Fundamentals – HJ24
- Business Management – HJ38
- CADD Modeling 3D – HJ02
- Child & Family Services – HJ14
- CNC Machining – HJ04
- Computer Crime Deterrence – HK26
- Computer-Aided Drafting 2D – HJ01
- Computer Networking – HJ42
- Criminal Justice – HJ75
- Culinary Arts – HJ77
- Dance – HK28
- Dietary Supervision – HJ65
- Disabilities/Mental Health – HJ11
- Drug and Alcohol Recovery Counselor – HJ10
- Early Childhood Education – HJ89
- Electronic Music and Audio Production – HJ06
- Engineering Technologies Exploratory – HJ73
- Family and Childcare Provider – HJ68*
- Finance – HJ70
- Fundamentals of Machine Technology – HJ20
- General Automotive Services – HK10
- Gerontology – HK11
- Graphics & Animation – HJ09
- Health Career Pathways – HK55
- Horticulture – HK18
- Landscape Design – HK30
- Lean Manufacturing – HN13
- Legal Studies/Paralegal – HJ69
- Management Information Systems – HJ13
- Manufacturing – HK19*
- Marketing Electronic Commerce – HJ63
- Modern Manufacturing Design – HJ15
- Multimedia/Web Authoring – HJ07
- Object-Oriented Programming – HK23
- Supply Chain Management – HN14
- Technical Communications – HJ61
- Visual Art – HJ78

**not accepting new students*

Non-degree

- Non-Degree – HZ99

Non-credit Proficiency Certificates are available.

See the most current course schedule at nv.edu/nc.

Connecticut State Colleges and Universities (CSCU) Transfer Ticket Degrees

- Biology Studies (A.A.) – H12HG01
- Chemistry Studies (A.A.) – H12HG02
- Communication Studies (A.A.) – H12HG03
- Criminology Studies (A.A.) – H12HG04
- English Studies (A.A.) – H12HG05
- History Studies (A.A.) – H12HG06
- Mathematics Studies (A.A.) – H12HG07
- Political Science Studies (A.A.) – H12HG08
- Psychology Studies (A.A.) – H12HG09
- Social Work Studies (A.A.) – H12HG10
- Sociology Studies (A.A.) – H12HG11

GENERAL EDUCATION CORE

DEFINITIONS YOU NEED TO KNOW WHEN SELECTING YOUR PROGRAM AND COURSES

1. **Credit Hours (cr.)** - College work is measured in units called credit hours. A credit-hour value is assigned to each course and is normally equal to the number of hours the course meets each week. Credit hours may also be referred to as semester hours.
2. **Contact Hours** - The actual number of hours required in a class or lab.
3. **Lecture Hours (lec.)** - The number of clock hours in the fall or spring semester the student spends each week in the classroom. This time frame is different for the shorter summer sessions.
4. **Laboratory Hours (lab.)** - The number of clock hours in the fall or spring semester the student spends each week in the laboratory or other learning environment. This time frame is different for the shorter summer sessions.
5. **Prerequisite** - A course that must be successfully completed or a requirement such as related life experiences that must be met before enrolling in another course.
6. **Corequisite** - A course that must be taken during the same or earlier semester as the course in which one is enrolling.
7. **General Education Requirements** - A term which refers to courses that meet the eleven General Education Competencies. (See next page.)
8. **Electives** - Courses which may be chosen from items 9 10 or 11.
9. **Liberal Arts Electives** - All course subjects listed in the General Education Core, modern languages, ESL, and advanced courses with the same designations. Exceptions: Horticulture, Business, and Allied Health courses do not qualify.
10. **General Electives** - All credit courses numbered 100 or higher listed in the catalog. Students should consider transferability of courses when choosing general electives.
11. **Directed Electives** - Credit courses that satisfy specific program requirements. These courses are listed with each program area.

12. **Foreign Language Equivalencies** - The following equivalencies satisfy the modern language requirements:

- a) 3 years of high school work in a single foreign language ancient or modern or
- b) 2 years of high school work and an added semester of a college course at a more advanced level in a single foreign language or
- c) 2 semesters of a single foreign language in college.

Note: Students may also take CLEP (College Level Examination Program) to satisfy the modern language requirements. Information on these tests is available from the Testing Center.

Note: ESL students may use up to six credits of Intermediate and Advanced levels of ESL courses to fulfill the Modern Language requirements.

13. **Non-Credit** - A course of study that does not apply towards a college degree; college credit is not earned. Typically designed as short courses, workshops, and customized programs; non-credit programs focus on knowledge and skills that can be applied directly to the job or personal and professional growth.
14. **Continuing Education Unit (CEU) Certificates** - CEU certificates are awarded in conjunction with mandatory continuing education requirements across different fields including: teacher professional development real estate nursing allied health insurance appraisal. Prior approval from the learner's Local Education Association must be obtained. Typically CEU's are awarded on a 1:10 ratio (i.e. one CEU for every ten hours of qualified instruction).

This College continues to add and adjust courses course designations and course numbers to its offerings. The General Education and the definitions will be adjusted accordingly.

OUR PHILOSOPHY AND REQUIREMENTS

Naugatuck Valley Community College considers general education an important component of its degree programs. While an appropriate level of mastery in occupations and technologies is clearly essential students are better prepared to live in the world and use this mastery only if they are also capable of understanding fundamental theory weighing values and forming independent judgments.

The College defines General Education in terms of the following competencies and goals:

Appreciation of the Aesthetic Dimensions of Humankind 3 credits	Students will understand the diverse nature, meanings, and functions of creative endeavors through the study and practice of literature, music, the theatrical and visual arts, and related forms of expression.
Appreciation of the Ethical Dimensions of Humankind (Across the Curriculum)	Students will identify ethical principles that guide individual and collective actions and apply those principles to the analysis of contemporary social and political problems.
Continuing Learning and Information Literacy 3 credits	Students will be able to use traditional and digital technology to access evaluate and apply information to the needs or questions confronting them throughout their academic professional and personal lives.
Critical Analysis and Logical Thinking (Across the Curriculum)	Students will be able to organize, interpret, and evaluate evidence and ideas within and across disciplines; draw reasoned inferences and defensible conclusions; and solve problems and make decisions based on analytical processes.
Historical Knowledge and Understanding 3 credits	Students will study the interrelatedness of various realms of human experience from multiple historical perspectives.
Oral Communication 3 credits	Students will be prepared to develop oral messages of varying lengths and styles that communicate effectively and appropriately across a variety of settings.
Quantitative Reasoning 3 credits	Students will learn to recognize, understand, and use the quantitative elements they encounter in various aspects of their lives. Students will develop a habit of mind that uses quantitative skills to solve problems and make informed decisions.
Scientific Knowledge and Understanding 3-4 credits	Students will gain a broad base of scientific knowledge and methodologies in the natural sciences. This will enable them to develop scientific literacy the knowledge and understanding of scientific concepts and processes essential for personal decision making and understanding scientific issues.
Scientific Reasoning 3-4 credits	Students will become familiar with science as a method of inquiry. Students will develop a habit of mind that uses quantitative skills to solve problems and make informed decisions.
Knowledge and Understanding of Social Phenomena 3 credits	Students will develop an increased understanding of the influences that shape a person’s or group’s attitudes, beliefs, emotions, symbols, and actions and how these systems of influence are created, maintained, and altered by individual, familial, group, situational, or cultural means.
Written Communication (6 Credits and Across the Curriculum)	Students will be prepared to develop written texts of varying lengths and styles that communicate effectively and appropriately across a variety of settings.

GENERAL EDUCATION CORE COURSE REQUIREMENTS

Focusing on the above competencies, course work in the General Education Framework ensures that NVCC students gain the fundamental skills, knowledge, and values needed for success in their academic, professional, and personal lives. A list of courses that fulfill each competency may be found under the “Approved Courses” link on the General Education website: <http://www.nv.edu/GEACC> and in this catalog. Students will fulfill General Education Requirements by completing the requisite number of credits in courses associated with each competency. For competencies identified as “Across the Curriculum” students should adhere to program requirements in order to fulfill these areas.

SCIENTIFIC KNOWLEDGE OR REASONING REQUIREMENT

Students must successfully complete at least one Scientific Reasoning or Scientific Knowledge course that contains a lab component.

GENERAL EDUCATION PROGRAM OVERSIGHT AND ASSESSMENT

The General Education Requirements are reviewed and assessed by the General Education Assessment and Curriculum design Committee (GEACC). This committee is composed of one library representative, and 10 faculty as well as non-voting members from the Registrar, Center for Academic Planning and Student Success (CAPSS), Curriculum and Educational Affairs (CEAC) and the Dean and Associate Dean of Academic Affairs, and the Dean of Academic Affairs. The committee must have at least one member with expertise in each competency area, and each academic division must have at least one and no more than 3 members.

The duties of the committee include identifying and approving college courses used to fulfill competency requirements. The committee is also responsible for researching, scheduling, and assisting in the implementation of assessment methods to determine if students are achieving competency outcomes.

GENERAL EDUCATION FOR CONNECTICUT STATE UNIVERSITY TRANSFER STUDENTS

In order to ease transfer between state colleges and universities within the Connecticut State Colleges and University system NVCC’s General Education program reflects the system’s General Education Framework. Based on this Framework students graduating with an Associate degree who complete NVCC’s General Education Requirements will be granted General Education credit upon transfer to any Connecticut State University or Community College.

GENERAL EDUCATION CORE

NVCC'S GENERAL EDUCATION CORE

Aesthetic Dimensions/Written Communication • Complete one of the following courses for 3 credits.

ART*H101	ENG*H211	ENG*H231	ENG*H269	MUS*H101
ART*H102	ENG*H214	ENG*H232	ENG*H274	THR*H101
COM*H157	ENG*H215	ENG*H241	ENG*H277	THR*H110
DAN*H101	ENG*H221	ENG*H242	ENG*H278	
ENG*H102	ENG*H222	ENG*H251	LAS*H201	

ECE 103 fulfills Aesthetic Dimensions for students in Early Childhood Education Program.
HRT 202 fulfills Aesthetic Dimensions for students in Horticulture Program.

Continuing Learning and Information Literacy • Complete one of the following courses for 3 credits.

CSA*H105	DAT*H101	ECN*H102
CSC*H101	ECN*H101	TCN*H101

EET 104 & EET 294, taken sequentially, fulfill Continuing Learning and Information Literacy for students in the Electronic Engineering Program.
ECE 109 fulfills Continuing Learning and Information Literacy for students in the Early Childhood Education Program.
PTA 125 fulfills Continuing Learning and Information Literacy for students in the Physical Therapy Assistant Program.
RSP 281 & RSP 282, taken sequentially, fulfill Continuing Learning and Information Literacy for students in the Respiratory Therapy Program.

Critical Analysis and Logical Thinking • See specific program requirements on how to fulfill this competency.

COM*H100	ENG*H200	ENG*H221	ENG*H242	ENG*H278	PHL*H112
COM*H157	ENG*H202	ENG*H222	ENG*H251	HRT*H222	PSY*H201
CSC*H101	ENG*H211	ENG*H231	ENG*H269	HRT*H224	PSY*H245
ENG*H101	ENG*H214	ENG*H232	ENG*H274	PHL*H101	SOC*H201
ENG*H102	ENG*H215	ENG*H241	ENG*H277	PHL*H111	

Ethical Dimensions • See specific program requirements on how to fulfill this competency.

CSA*H105	DAT*H101	ECN*H102
CSC*H101	ECN*H101	TCN*H101

EET 110 fulfills Ethical Dimensions for students in the Electronic Engineering Technology Program. PTA 120 fulfills Ethical Dimensions for students in the Physical Therapy Assistant Program.
RSP 141 fulfills Ethical Dimensions for students in the Respiratory Therapy Program.

Historical Knowledge and Understanding • Complete one of the following courses for 3 credits

BBG*H231	HIS*H102	HIS*H202	POL*H103
HIS*H101	HIS*H201	LAS*H201	POL*H111

Oral Communication • Complete one of the following courses for 3 credits.

COM*H100	COM*H173
ESL*H157	

Quantitative Reasoning • Complete one of the following courses for 3 credits.

MAT*H121*	MAT*H143	MAT*H167	MAT*H232	MAT*H268
MAT*H122*	MAT*H144	MAT*H172	MAT*H254	MAT*H285
MAT*H135*	MAT*H146	MAT*H185	MAT*H256	HRT*H224

*indicates course is not accepted for transfer as part of the CSCU TAP Pathways agreement

Scientific Knowledge and Understanding • Complete one of the following courses for 3-4 credits.

AST*H101	BIO*H115	BIO*H171	BIO*H235	HRT*H102
AST*H111	BIO*H121	BIO*H180	CHE*H111	PHY*H110
BIO*H105	BIO*H122	BIO*H181	CHE*H121	PHY*H122
BIO*H110	BIO*H126	BIO*H211	CHE*H122	PHY*H221
BIO*H111	BIO*H155		GLG*H121	PHY*H222

54 GENERAL EDUCATION CORE

Scientific Reasoning • Complete one of the following courses for 3-4 credits.

BIO*H105	BIO*H155	CHE*H111	CSC*H252	HRT*H222	PHY*H122
BIO*H115	BIO*H181	CHE*H121	DAN*H175	HRT*H224	PHY*H221
BIO*H121	BIO*H212	CHE*H122	DAR*H158	PHY*H110	PHY*H222
BIO*H122	BIO*H235	CSC*H250	GLG*H121	PHY*H121	PSY*H258

Social Phenomena • Complete one of the following courses for 3 credits.

ANT*H101	COM*H101	ECN*H101	GEO*H111	PSY*H201	SOC*H101
ANT*H121	COM*H172	ECN*H102	LAS*H201	PSY*H245	
ANT*H205	COM*H202	GEO*H102	PSY*H111	PSY*H260	

Written Communication • Complete two of the following courses for 6 credits.

ENG*H101	ENG*H211	ENG*H222	ENG*H242	ENG*H277
ENG*H102	ENG*H214	ENG*H231	ENG*H251	ENG*H278
ENG*H200	ENG*H215	ENG*H232	ENG*H269	ESL*H162
ENG*H202	ENG*H221	ENG*H241	ENG*H274	ESL*H169

SPECIAL PROGRAMS OF STUDY

COOPERATIVE EDUCATION (CO-OP)

What is Cooperative Education?

Cooperative Education at Naugatuck Valley Community College is designed to integrate students' academic learning with career related work experience. The program is designed in the School-to-Career model with three interlinking components:

School-based learning - courses the students must complete in a particular major prior to beginning co-op;

Work-based learning - an employment experience in the student's chosen field of study; and

Connecting activities - students must attend a weekly co-op seminar during their work experience.

Cooperative education provides students with an answer to a common question asked by employers "What experience have you had?" Upon successful completion of a Co-op experience students will have an up-to-date resume with hands-on experience in their field of study and three to six academic credits for their work experience.

Who is eligible for Co-op?

Students who have completed a minimum of 24 college credits and have maintained a "C" average overall and in their major and have a GPA of 2.0 or better are eligible. NVCC graduates are not eligible for Co-op. Students must meet specific curriculum requirements related to their major prior to enrollment in Co-op. In some fields of study Co-op is required; in others it is elective. Current majors with a Co-op component include:

(E - Elective; R - Required)

- Automotive Technician (R)
- Criminal Justice (R)
- Early Childhood Education (R)
- Fire Technology and Administration (E)
- Horticulture (R)
- Human Services (R)
- Legal Assistant/Paralegal (E)

How Does Co-op Work?

Students who wish to participate in Co-op should meet with their program coordinator and fill out a Cooperative Education Application. The faculty coordinator will meet with the student to review his/her college transcript to ensure that all mandatory coursework has been completed and to discuss the type of work experience the student is interested in pursuing. The faculty coordinator will contact area employers to assist the student in finding a suitable Co-op placement. Students who enroll in Co-op must attend a professional development workshop on resume writing and interview techniques prior to beginning their work experience. Most Co-op placements require the student to complete 225 hours of paid work experience and register for a Co-op course.

How Is Academic Credit Awarded?

Faculty facilitators supervise the work experience through regular site visits and through the weekly Co-op courses. Granting of college credit is based on the evaluation of the student's learning and job performance by the faculty facilitator in consultation with the employer. The awarding of credit is directly linked to the quality of the work experience and the learning that results.

PRIOR LEARNING EVALUATION

Naugatuck Valley Community College acknowledges its role in assisting adults to learn throughout their lives; therefore the College enthusiastically supports the functions of continuing education in all divisions. The College promotes "learning as a lifelong process" and believes that everyone should have the opportunity to pursue different interests at convenient times and at different rates of speed.

Prior Learning Evaluation at Naugatuck Valley Community College was accepted by the President's Cabinet in June 1982 as a result of a two-year study which originated within the College's advisory system. The intent is to recognize the varied backgrounds of students coming to the College and to provide them with opportunities to begin their college careers or to make adjustments in their professions without duplicating proficiencies which they may already have attained.

No more than 50 percent of the credits required for a degree shall be awarded for prior learning. The credits must be awarded within the approved curricula of the College.

The student may apply for the evaluation of prior learning through one of the following procedures:

Credit by Examination

If the student wishes to have prior learning assessed through examination for select courses he or she may use:

- College Level Examination Program (CLEP)
- College-Produced Examinations

The assessment verifies that learning has occurred and that the learning is equivalent in level and nature to learning acquired in an approved college course or program. Please contact Division Directors for a list of courses available through credit-by-examination.

Advanced Placement

Degree credit will be granted on the basis of scores on the Advanced Placement Examinations administered by the College Entrance Examination Board. Students who earn scores of 3 or higher receive credit for the courses for which the examinations are stipulated as measures.

Board for State Academic Awards

(Charter Oak State College)

Students may also have their prior learning evaluated by Charter Oak College by calling (860) 832-3846.

DISTANCE LEARNING

Distance Learning serves students who need flexibility in course scheduling and learning media. These courses are designed to instruct highly motivated self-learners whose busy schedules make a distance learning course a worthwhile option. Distance Learning courses are offered primarily through the Blackboard learning management system and will include media-rich learning objects such as video, audio and digital print. Computer literacy and high speed access to the internet, the ability to produce word processed documents and view electronic presentations are required, as well as specific technical settings on the computer being used. Refer to course description for prerequisites, as each course has different requirements. Distance Learning courses follow the standard academic calendar of the College and may include face-to-face class meetings. For more information refer to the Distance Learning section of the College website at <http://nv.edu/Academics/Distance-Learning>

Naugatuck Valley Community College offers 3 formats of Distance Learning delivery:

Online Courses

Online courses take place fully online and do not meet on specific days or times; they generally operate on weekly assignments and due dates.

Online Courses with Campus Requirement

These are courses in which all instruction occurs online but also require on-campus meetings, such as an orientation or testing.

Hybrid Courses

Hybrid courses are defined as courses whose contact hours are split between online and on-ground (in a classroom).

SPECIAL INTEREST AND GROUP CONTRACT COURSES

Special credit or non-credit courses can be designed or existing courses tailored to meet specific requirements or needs of individual professional groups agencies businesses and industries.

These courses can be offered on an individual fee basis or on a contract basis. Contractual arrangements are possible for individual businesses or agencies to have courses given on campus and also on-site for their management mid-management secretarial and other staff to enhance their ability on the job. In the past these have included nursing home administrators area hospitals factories small business associations and public service agencies among others. Costs vary depending on instructional and administrative fees. For additional information call the Center for Business and Industry Training Center.

STUDY ABROAD

As a member college in The College Consortium for International Studies Naugatuck Valley Community College may enroll students for semester abroad programs in the following countries and institutions of higher education:

Bulgaria	University of Ploudiv
China	Nanjing University
Colombia	Universidad Javeriana
Cyprus	Frederick Polytechnic University
Ecuador	Universidad San Francisco de Quito
England	Thames Valley University
France	The Institute for American Universities
Germany	Collegium Palatinum and Schiller International University
Greece	Anatolia College
Ireland	St. Patrick's College University of Limerick
Israel	University of Haifa and Specialized Schools
Italy	The American University of Rome Scuola Lorenzo de Medici (Florence)
Japan	Suny/Toyana-Ken
Mexico	Universidad del Valle de Mexico
Portugal	CIAL Centrok de Linguas
Russia	The Institute of Youth Moscow
Spain	CCIS Institute The University of Seville
Switzerland	Franklin College

Summer study is also available in England France Germany and Italy.

Admission to Study Abroad

Students are evaluated for admission to academic studies abroad according to their academic ability maturity motivation and potential adaptability to a foreign culture. They have usually completed their first year of college. A cumulative grade point average of at least 2.5 is required and letters of recommendation must be secured from professors who know the student.

Credits Transcripts Costs

Students register at Naugatuck Valley Community College and pay the appropriate tuition and fees. Upon successful completion of the formal courses abroad each student receives a transcript from the college reflecting grades achieved and credits earned.

Most courses taken abroad transfer readily to four-year institutions. A full semester of courses usually earns fifteen (15) credits. Summer session earns six (6) to nine (9) credits. Total program costs range from \$4250 to \$9000 depending on the country selected. Financial aid is available to qualified students.

For Further Information

Complete details about host institutions abroad what is covered by the total program cost and application materials may be obtained from the Liberal Arts and Behavioral/Social Sciences Division.





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ACCOUNTING

As society becomes more complex, trained personnel are needed to interpret and manage the fiscal aspects of business and industry. The curriculum is designed either as a transfer or career program. Career-oriented students are prepared for beginning positions in public and private accounting. Typical positions for which graduates are qualified include: junior account clerk, assistant*auditor, cost accounting clerk, and assistant office manager.

Students who plan to transfer to a four-year business program are urged to see a counselor or the division director for guidance regarding the transferability of courses to the four-year program. Courses listed under Naugatuck Valley's business programs may not automatically transfer to a four-year college.

Students also have the opportunity to join the Accounting/Finance Club.

General Education Core course listings and definitions appear on pages 53-54. Placement testing will determine the sequencing of courses. Additional courses may be required.

Competency or Program Requirement	Course Number and Title	Required Credits
Aesthetic Dimensions/Written Communications	Choose any Aesthetic Dimensions/Written Communications listed	3
Continuing Learning and Information Literacy/Ethics	CSC*H101 Introduction to Computers	3
Critical Analysis and Logical Thinking/Written Communication	ENG*H101 Composition	3
Historical Knowledge	BBG*H231 Business Law I	3
Oral Communication	Choose any Oral Communication course listed	3
Quantitative Reasoning	MAT*H167 Principles of Statistics	3
Scientific Knowledge ^o	Choose any Scientific Knowledge listed	3-4
Scientific Reasoning ^o	Choose any Scientific Reasoning listed	3-4
Social Phenomena	ECN*H101 Principles of Macroeconomics	3
Written Communication	Choose any Written Communication listed except ENG*H101	3
Program Requirements	ACC*H113 Principles of Financial Accounting	3
	ACC*H117 Principles of Managerial Accounting	3
	BBG*H210 Business Communications	3
	BBG*H232 Business Law II	3
	ACC*H271 Intermediate Accounting I	3
	ACC*H272 Intermediate Accounting II	3
	ECN*H102 Microeconomics	3
	Directed Elective in Accounting, Business, or Computers [†]	9

Total Credits: 61-62

Any given course may only be used to satisfy one of the competency areas even if it is listed under more than one.

[†]Selection of Finance courses should be made in consultation with Accounting faculty advisor.

^oAt least one Scientific Knowledge and Understanding OR Scientific Reasoning course must have a lab component.

Program Outcomes

Upon successful completion of all program requirements, graduates will be able to:

1. Demonstrate the use of the concepts and techniques of generally accepted accounting principles in the recording and reporting of financial information.
2. Describe accounting system procedures and techniques.
3. Analyze and use financial reports for decision-making.
4. Explain the use of financial information in controlling and evaluating performance.
5. Use the vocabulary of financial and managerial accounting and economics for communicating.
6. Explain how budgeting, activity-based costing and strategic cost management foster the effective use of resources and help an organization accomplish its goals.
7. Use computerized spreadsheets and accounting software.
8. Apply basic knowledge from history, social sciences, behavioral sciences, arts, literature and science to create solutions to problems that they have not encountered before.
9. Demonstrate reasoning and analytic skills.
10. Work with others, including culturally and intellectually diverse peoples.
11. Demonstrate the ability to acquire, organize and present information effectively, regardless of medium – written, spoken or electronic.
12. Show how organizational dynamics, socio-political and economic environments shape the creation of solutions.
13. Display the traits and attitudes that promote ongoing success and a strong work ethic.

AUTOMOTIVE TECHNICIAN

The ASE Certified Master Automotive Technician Program is a course of study designed to accommodate both full and part-time students, culminating in an Associate of Science degree. Service of today's complex automobiles requires highly trained technicians who have mastered a wide range of talents and skills. Naugatuck Valley Community College, in cooperation with the National Automotive Dealership Association, the U.S. Department of Labor, local, and national dealership associations, and the major automotive manufacturers, developed the Automotive Technician Program to meet the longstanding need for skilled automotive service technicians.

Students wishing to enroll in the Automotive Technician Program must demonstrate basic mathematics, written English, reading, and mechanical competency as determined by the College Placement Tests. Individuals interested in the Automotive Technician Program should contact the Program Coordinator or the Admissions Office. Students may be admitted to the College prior to admission to the program. The instruction, course of study, facilities, and equipment of Naugatuck Valley Community College, has been evaluated by the National Automotive Technicians Education Foundation (NATEF) and has met the National Institute for Automotive Service Excellence (ASE) standards of quality for the training of automotive technicians as a Master Automotive Technician Training Certification Program. These organizations can be contacted as follows: NATEF, 13505 Dulles Technology Dr., Suite 2 • Hemdon, VA 20171-3413, ASE, 13505 Dulles Technology Dr., Suite 2 • Hemdon, VA 20171-3413.

General Education Core course listings and definitions appear on pages 53-54. Placement testing will determine the sequencing of courses. Additional courses may be required.

Competency or Program Requirement	Course Number and Title	Required Credits
Aesthetic Dimensions/Written Communications	Choose any Aesthetic Dimensions/Written Communications listed	3
Continuing Learning and Information Literacy/Ethics	CSA*H105 Introduction to Software Applications or CSC*H101 Introduction to Computers	3
Critical Analysis and Logical Thinking/Written Communication	ENG*H101 Composition	3
Historical Knowledge	BBG*H231 Business Law I	3
Oral Communication	Choose any Oral Communication course listed	3
Quantitative Reasoning ^o	MAT*H121 Applications for Business and other Careers, MAT*H135 Topics in Contemporary Mathematics, MAT*H167 Principles of Statistics	3
Scientific Knowledge ^{oo}	PHY*H110 Introduction to Physics	4
Scientific Reasoning ^{oo}	Waived	0
Social Phenomena	ECN*H101 Principles of Macroeconomics	3
Written Communication	Choose any Written Communication listed	3
Program Requirements	ATP*H100 Integrated Automotive	3
	ATP*H130 Brake Systems	3
	ATP*H110 Automotive Electrical Systems	3
	ATP*H150 Suspension and Steering Systems	3
	ATP*H210 Engine Performance	3
	ATP*H120 Engine Repair	3
	ATP*H185 Automotive Service & Parts Management	2
	ATP*H261 Manual Drivetrain and Axles	2
	ATP*H220 Automotive Emissions	3
	ATP*H262 Automatic Transmission and Transaxles	2
	ATP*H140: Automotive Heating and Air Conditioning	3
	ATP*H190 Metallurgy/Welding or ATP Course Approved by Coordinator	2
	ATP*H290 Co-op Work Experience I	3
Total Credits: 66	ATP*H291 Co-op Work Experience II	3

Any given course may only be used to satisfy one of the competency areas even if it is listed under more than one.

^oMAT*H137 and courses numbered lower than MAT*H137 will not transfer to Connecticut State Universities as Quantitative Reasoning courses.

^{oo}At least one Scientific Knowledge and Understanding OR Scientific Reasoning course must have a lab component.

Program Outcomes

Upon successful completion of all program requirements, graduates will be able to:

1. Apply Language Arts and Communications skills related to the occupation, including but not limited to: reading, writing, and oral communication.
2. Perform Mathematics related to the occupation, including but not limited to: algebraic expressions, arithmetic, decimals and graphs.
3. Use scientific methods and critical thinking to solve problems in Science related to the occupation, including but not limited to: electricity, chemical reactions, heat motion, and hydraulics.
4. Demonstrate Workplace Skills related to the occupation, including but not limited to, preparing a resume, seeking employment, maintaining a safe and healthy workplace environment, demonstrating workplace ethics and teamwork.
5. Apply knowledge of theory and safety to accomplish certain tasks related to the occupation.
6. Identify and use appropriate tools, testing and measurement equipment to accomplish certain tasks related to the occupation.
7. Use current reference and training materials from accepted industry publications and standards to accomplish certain tasks related to the occupation.
8. Apply knowledge of general engine diagnosis and repair, including but not limited to the engine's: cylinder heads, valve train, block, lubrication, and cooling system.
9. Apply knowledge of general transmission and transaxle maintenance, adjustment, diagnosis and repair.
10. Apply knowledge of suspension and steering systems (including wheel and tire), diagnosis, service, adjustments, alignment and repair.
11. Apply knowledge of general disc and/or drum brake system hydraulics, power assist, and ABS (antilock brakes), maintenance, adjustment diagnosis and repair.
12. Apply knowledge of general electrical/electronic systems, including but not limited to: starting, charging, lighting, wiring, accessories, diagnosis and repair.
13. Apply knowledge of general heating and air conditioning systems and their components, maintenance, adjustment, diagnosis and repair.
14. Apply knowledge of general engine performance, including but not limited to: computer controls, ignition, fuel, exhaust, and emission systems, and their maintenance, diagnosis, adjustments and repair.
15. Apply knowledge of computer applications including word processing, spreadsheets, graphs and other software related to the occupation.

AUTOMOTIVE TECHNICIAN MANAGEMENT

The complexity of the automobile requires more sophisticated technicians and specialists than ever before. The need for qualified personnel has expanded beyond the bay into service and shop management. Until now students had to decide whether to take the Automotive Technician Program Degree or a Business Degree if they aspired towards Automotive Management. The Management Option creates a sensible way for employers to fill management positions.

General Education Core course listings and definitions appear on pages 53-54. Placement testing will determine the sequencing of courses. Additional courses may be required.

Competency or Program Requirement	Course Number and Title	Required Credits
Aesthetic Dimensions/Written Communications	Choose any Aesthetic Dimensions/ Written Communications listed	3
Continuing Learning and Information Literacy/Ethics	CSA*H105 Introduction to Software Applications or CSC*H101 Introduction to Computers	3
Critical Analysis and Logical Thinking/ Written Communication	ENG*H101 Composition	3
Historical Knowledge	BBG*H231 Business Law I	3
Oral Communication	Choose any Oral Communication course listed	3
Quantitative Reasoning ^o	MAT*H121 Applications for Business and other Careers, MAT*H135 Topics in Contemporary Mathematics, or MAT*H167 Principles of Statistics	3
Scientific Knowledge ^{oo}	PHY*H110 Introduction to Physics	4
Scientific Reasoning ^{oo}	Waived	0
Social Phenomena	ECN*H101 Principles of Macroeconomics	3
Written Communication	Choose any Written Communication listed	3
Program Requirements	ATP*H100 Integrated Automotive	3
	ATP*H120 Engine Repair	3
	ATP*H130 Brake Systems	3
	ATP*H110 Automotive Electrical Systems	3
	ATP*H150 Suspension and Steering Systems	3
	ATP*H185 Automotive Service & Parts Management	2
	BBG*H101 Introduction to Business	3
	BES*H118 Small Business Management	3
	ACC*H113 Principles of Financial Accounting	3
	BMG*H202 Principles of Management	3
ACC*H117 Managerial Accounting	3	

Total Credits: 60

Any given course may only be used to satisfy one of the competency areas even if it is listed under more than one.

^oMAT*H137 and courses numbered lower than MAT*H137 will not transfer to Connecticut State Universities as Quantitative Reasoning courses.

^{oo}At least one Scientific Knowledge and Understanding OR Scientific Reasoning course must have a lab component.

Program Outcomes

Upon successful completion of all program requirements, graduates will be able to:

1. Apply Language Arts and Communications skills related to the occupation, including but not limited to: reading, writing, and oral communication.
2. Perform Mathematics related to the occupation, including but not limited to: algebraic expressions, arithmetic, decimals and graphs.
3. Use scientific methods and critical thinking to solve problems in Science related to the occupation, including but not limited to: electricity, chemical reactions, heat, motion, and hydraulics.
4. Demonstrate Workplace Skills related to the occupation, including but not limited to: preparing a resume, seeking employment, maintaining a safe and healthy workplace environment, demonstrating workplace ethics and teamwork.
5. Apply knowledge of Computer Applications including word processing, spreadsheets, graphs and other software related to the occupation.
6. Apply knowledge of theory and safety to accomplish certain tasks related to the occupation.
7. Identify and use appropriate tools, testing and measurement equipment to accomplish certain tasks related to the occupation.
8. Use current reference and training materials from accepted industry publications and standards to accomplish certain tasks related to the occupation.
9. Apply knowledge of general engine diagnosis and repair, including but not limited to the engines: cylinder heads, valve train, block, lubrication, and cooling system .
10. Apply knowledge of suspension and steering systems (including wheel and tire), diagnosis, service, adjustments, alignment and repair.
11. Apply knowledge of general disc and/or drum brake system, hydraulics, power assist, and ABS (antilock brakes), maintenance, adjustment, diagnosis, and repair.
12. Apply knowledge of general electrical/electronic systems, including but not limited to: starting, charging, lighting, wiring, accessories, diagnosis and repair.
13. Demonstrate basic knowledge of management, human resources, and organizational development in an entry-level management position.
14. Understand and practice the various functions of management as well as the nature and responsibilities of a manager.
15. Interpret management information from various sources such as financial statements, annual reports, and publications.
16. Demonstrate a responsible attitude in relationships with employers, fellow employees, working groups, and the macro-environment.

AVIATION SCIENCE (FLIGHT CURRICULUM) • THIS PROGRAM IS NOT ACCEPTING NEW STUDENTS

The Aviation Science Degree Program consists of the basic degree in aviation science, and electives that allow students to focus on either a flight curriculum or a management option. Directed Electives from either course of study may be used to fulfill a student's Open Elective requirements.

The Flight Curriculum of the Aviation Science Program is designed to provide any current pilot or college student with the educational background and training required to seek a career in aviation as a professional pilot. This is both an academic degree program and a pilot certification process.

The flight training, simulator training and theory portions of the Flight Curriculum will prepare students to meet the minimum requirements for Federal Aviation Administration (FAA) 141 certification for private, commercial, instrument, multi-engine, and flight instructor ratings for either fixed or rotary wing (helicopter) aircraft.

Prior to enrollment in Flight School courses, applicants must obtain an appropriate Federal Aviation Administration (FAA) flight physical from an authorized Aviation Medical Examiner. All flight training costs are the responsibility of the student.

The Aviation Science Degree Program can also serve as the first two years of a bachelor's degree in Aviation Science for those students interested in transferring to a four-year institution. Students could pursue a bachelor's degree in one of several standard aviation majors: Aviation Management, Air Traffic Control, Aviation Electronics, Aviation Maintenance, and Aviation Computer Science.

*Note: The Program consists of twenty-four (24) credit hours of aviation specific specialty courses, 18 credits of which require training specifically designed to enable students to pass FAA Knowledge or Flight Tests. Flight courses required to complete the Flight Curriculum (AVS*H201, 203 and 204) are taught at area flight schools. Students wishing to enroll in the Aviation Science Program should contact the Aviation Science Coordinator for advisement before beginning the Program.*

General Education Core course listings and definitions appear on pages 53-54. Placement testing will determine the sequencing of courses. Additional courses may be required.

Course Type	Course Number & Title	Cr.	Program Outcomes
GENERAL EDUCATION			<p><i>Upon successful completion of all program requirements, graduates will:</i></p> <ol style="list-style-type: none"> 1. Possess private, commercial, and flight instructor certificates ratings. 2. Be eligible to apply for employment as a commercial or corporate pilot or as a flight instructor. 3. Have the necessary background to continue their aviation science education at a four-year institution. 4. Be able to demonstrate the following fundamental skills required of all aviators: <ol style="list-style-type: none"> a. Obtain, analyze, and apply current and forecast weather data to visual and instrument flight planning and execution. b. Perform calculations necessary for safe flight planning and execution to include wind, aircraft weight and balance, and fuel consumption. c. Review and apply aircraft performance characteristics to ensure safe flight operations. d. Create and file an appropriate flight plan for any type of flight. e. Interpret and use aeronautical charts and publications applicable to visual and instrument operations. f. Apply appropriate methods of navigation in order to complete a flight as planned. g. Apply basic principles of physical science to aerodynamics and the performance of aircraft in flight. h. Evaluate physiological and psychological factors that affect pilots as they relate to flight hazards and pilot risk factors. i. Communicate with other crewmembers as well as members of the air traffic system in a clear, concise, and accurate manner.
Core Communications	COM*H100 Introduction to Communications	3	
Core Communications	ENG*H101 Composition	3	
Core Humanities	ENG*H102 Literature and Composition	3	
Core Mathematics	MAT*H167 Principles of Statistics	3	
Core Science	PHY*H121 General Physics I	4	
Core Behavioral Science	PSY*H111 General Psychology I	3	
Program Behavioral Science or Core Social Science	Any Behavioral Science (ANT, PSY, SOC) course <i>or</i> any Social Science (ECN, GEO, HIS, POL) course	3	
Core Arts or Humanities	Any Arts course or Humanities course	3	
PROGRAM REQUIREMENTS			
Program Requirement	AVS*H101 Private Pilot Lecture	3	
Program Business	BMG*H202 Principles of Management	3	
Program Business	CSA*H105 Introduction to Software Applications	3	
Program Mathematics	MAT*H172 College Algebra	3	
Program Mathematics	MAT*H185 Trigonometric Functions	3	
Program Science	PHY*H122 General Physics II	4	
Program Science	MET*H101 Meteorology	3	
OPTION REQUIREMENTS			
Program Requirement	AVS*H103 Instrument Lecture	3	
Program Requirement	AVS*H104 Commercial Pilot Lecture	3	
Program Requirement	AVS*H201 Private Pilot Flight Co-op	3	
Program Requirement	AVS*H203 Instrument Flight Training Co-op	3	
Program Requirement	AVS*H204 Commercial Flight Training Co-op	3	
Program Requirement	Any Aviation Science (AVS) courses (AVS*H108 Certified Flight Instructor and AVS*H208 Certified Flight Instructor Co-op are strongly recommended for the helicopter curriculum)	6	
Total Credits:		68	

AVIATION SCIENCE (MANAGEMENT CURRICULUM)

The Aviation Science Management Program consists of the basic degree in aviation science, and electives that allow students to focus on a management option. Directed Electives from either flight or management courses of study may be used to fulfill a student's Open Elective requirements.

This degree program is designed to provide students with the knowledge and skills necessary to be successful in a broad range of entry-level aviation management careers including airport operations, land-side/air-side management, aircraft manufacturing, airlines, corporate flight departments, airport authorities, and state and federal aviation regulatory agencies including the Federal Aviation Administration (FAA) and the National Transportation Safety Board (NTSB).

This program can also serve as the first two years of a bachelor's degree in Aviation Science for those students interested in transferring to a four-year institution. Students could pursue a bachelor's degree in one of several standard aviation majors: Aviation Management, Air Traffic Control, Aviation Electronics, Aviation Maintenance, and Aviation Computer Science.

General Education Core course listings and definitions appear on pages 53-54. Placement testing will determine the sequencing of courses. Additional courses may be required.

Competency or Program Requirement	Course Number and Title	Required Credits
Aesthetic Dimensions/Written Communications	Choose any Aesthetic Dimensions/Written Communications listed	3
Continuing Learning and Information Literacy/Ethics	CSA*H105 Introduction to Software Applications or CSC*H101 Introduction to Computers	3
Critical Analysis and Logical Thinking/Written Communication	ENG*H101 Composition	3
Historical Knowledge	Choose any Historical Knowledge listed	3
Oral Communication	Choose any Oral Communication listed	3
Quantitative Reasoning	MAT*H172 College Algebra	3
Scientific Knowledge [◊]	PHY*H122 General Physics II	4
Scientific Reasoning [◊]	PHY*H121 General Physics I	4
Social Phenomena	PSY*H111 General Psychology I	3
Written Communication	Choose any Written Communication listed	3
Program Requirements	AVS*H120 Foundations of Aviation	3
	AVS*H130 Air Transportation Systems	3
	AVS*H140 Aerospace Safety	3
	AVS*H150 Airport Management I	3
	AVS*H151 Airport Management II	3
	MAT*H185 Trigonometric Functions	3
	BMG*H202 Principles of Management	3
	MET*H101 Meteorology	3
Business Elective: Any Business Course	3	

Program Outcomes

Upon successful completion of all program requirements, graduates will:

1. Communicate clearly using both oral and written communications.
2. Demonstrate a detailed understanding of the National Airspace System Plan (NASP).
3. Understand and interpret Federal Aviation Regulations (CFR 14) applicable to airport and air transport operations.
4. Demonstrate an understanding of aviation history and aviation law and the role of each in shaping the current aviation industry.
5. Have a thorough understanding of airport management issues including financing, revenue/expense sources, safety, security, planning, design, and management of airports in the United States.
6. Have a thorough understanding of air transportation and aerospace issues including air transportation/aerospace history, economics of airlines and general aviation, airline management and organization, forecasting methods, pricing/demand/output determination, airline scheduling, fleet planning, and labor relations.

Total Credits: 62

Any given course may only be used to satisfy one of the competency areas even if it is listed under more than one.

[◊] At least one Scientific Knowledge and Understanding OR Scientific Reasoning course must have a lab component.

BEHAVIORAL SCIENCE

This program is a course of study for students who intend to pursue a Bachelor Degree in one of the Behavioral Sciences (Psychology, Sociology, or Anthropology). It provides the foundation for an education in these disciplines, while also ensuring a more general education in the arts and sciences. The requirements for this degree will allow students to transfer seamlessly to most four-year colleges and to successfully complete their Bachelor Degree in Psychology, Sociology, or Anthropology without loss of credit or time.

Job market trends reveal continued high interest and opportunities in the Behavioral Sciences. This program provides students with the type of educational foundation that is necessary to achieve success in psychology, sociology, or anthropology.

General Education Core course listings and definitions appear on pages 53-54. Placement testing will determine the sequencing of courses. Additional courses may be required.

Competency or Program Requirement	Course Number and Title	Required Credits
Aesthetic Dimensions/Written Communications	Choose any Aesthetic Dimensions/ Written Communications listed	3
Continuing Learning and Information Literacy/Ethics	Prefer CSA*H105 Introduction to Software Applications or CSC*101 Introduction to Computers	3
Critical Analysis and Logical Thinking/ Written Communication	ENG*H101 Composition	3
Historical Knowledge	Choose any Historical Knowledge listed	3
Oral Communication	Choose any Oral Communication listed	3
Quantitative Reasoning	MAT*H167 Principles of Statistics	3
Scientific Knowledge ^o	BIO*H115 Human Biology & Lab	4
Scientific Reasoning ^o	Choose any Scientific Reasoning listed	3-4
Social Phenomena	Choose any Social Phenomena listed	3
Written Communication	Choose any Written Communication listed other than ENG*101	3
Program Requirements	ANT*H101 Introduction to Anthropology	3
	PSY*H111 General Psychology	3
	PSY*H112 General Psychology II	3
	SOC*H101 Principles of Sociology	3
	SOC*H201 Contemporary Social Issues	3
	Modern Language [†]	6
	Additional 2XX level ANT, PSY, or SOC	6
General Elective, Choose from any credit bearing courses in the college catalog.	3	

Total Credits: 61-62

Any given course may only be used to satisfy one of the competency areas even if it is listed under more than one.

[†]Students who have completed 3 years of a modern language in high school may have satisfied this requirement and can substitute 6 credits of Liberal Arts electives. Students should consult with their advisor to select appropriate courses.

^o At least one Scientific Knowledge and Understanding OR Scientific Reasoning course must have a lab component.

Program Outcomes

Upon successful completion of all program requirements, graduates will be able to:

1. Present a well-written research report that demonstrates the ability to think and write critically.
2. Present oral reports before a group.
3. State the major theories, processes, and research methods important in psychology
4. State the major theories, concepts, and research methods important in sociology,
5. Read and explain the presence and importance of behavioral science concepts in literature.
6. Use basic psychological concepts in applied settings and circumstances.
7. Evaluate the causes and consequences of perceived differences and inequalities among groups of people.
8. Describe a conceptual framework for the origin of man and the development of culture.
9. Use microcomputers to complete research in the behavioral sciences.
10. Use statistical methods for behavioral science research.
11. Describe the basic biological processes involved in human genetics, evolution, and physiology.
12. Evaluate the perceived differences among groups of people.
13. Critically analyze the effects of biological forces on the behaviors of groups and individuals.

BUSINESS ADMINISTRATION**Business Computer Applications Option**

The goal of the Business Administration - Business Computer Applications program is to prepare students for employment in jobs in business and industry by providing a theoretical and practical foundation of business subject matter and by equipping them with needed skills in the use of application software that is appropriate for today's marketplace. The degree provides the student with strong business skills, coupled with a proficiency in the use of computers. The computer courses supplement the business skills and answer the question, "How do computers relate to business?" rather than "How do computers work?" Graduates of the program will be well qualified for entry-level positions in business and industry.

General Education Core course listings and definitions appear on pages 53-54. Placement testing will determine the sequencing of courses. Additional courses may be required.

Competency or Program Requirement	Course Number and Title	Required Credits
Aesthetic Dimensions/Written Communication	Choose any Aesthetic Dimensions/ Written Communication listed	3
Continuing Learning and Information Literacy/Ethics	CSA*H105 Introduction to Software Applications or CSC*H101 or Introduction to Computers	3
Critical Analysis and Logical Thinking/ Written Communication	ENG*H101 Composition	3
Historical Knowledge	BBG*H231 Business Law I	3
Oral Communication	Choose any Oral Communication listed	3
Quantitative Reasoning ^o	Choose any Quantitative Reasoning listed (Advising recommended for transfer)	3
Scientific Knowledge ^{oo}	Choose any Scientific Knowledge listed	3-4
Scientific Reasoning ^{oo}	Choose any Scientific Reasoning listed	3-4
Social Phenomena	ECN*H101 Principles of Macroeconomics	3
Written Communication	Choose any Written Communication listed	3
Program Requirements	ACC*H113 Principles of Financial Accounting	3
	ACC*H117 Principles of Managerial Accounting	3
	ECN*H102 Principles of Microeconomics	3
	CSA*H135 Spreadsheet Applications	3
	CSA*H205 Advanced Applications	3
	CSC Program Elective †	15

Program Outcomes

Upon successful completion of all program requirements, graduates will be able to:

1. Demonstrate a level of mathematical skill appropriate for employment in a business environment.
2. Read, understand and prepare standard types of business communications.
3. Demonstrate an understanding of basic theory and practice in his/her focus area.
4. Possess skills appropriate to his/her focus area in the following software:
 - operating system
 - word processor
 - electronic spreadsheet
 - presentation software
 - internet browser
 - database management system (for management and marketing focus areas)
 - general ledger accounting system (for accounting focus)
 - other software as appropriate to the student's focus area
5. Use the Internet for business purposes, including research, marketing, stock market analysis, etc.
6. Read, understand, and use software documentation.

Total Credits: 61-62

Any given course may only be used to satisfy one of the competency areas even if it is listed under more than one.

†Choose five of the following:

ACC*H123 Accounting Software Applications

ACC*H231 Cost Accounting I

ACC*H271 Intermediate Accounting I

CSA*H145 or CSC/CST course

CSC/CST course

ACC course (ACC*H290 recommended)

BFN*H201 Principles of Finance

BFN*H220 Financial Management

BMG*H202 Principles of Management

CSA*H145, or appropriate CSC/CST course

Finance, CSA*H145, or appropriate CSC/CST course

Finance (BFN*H296 recommended)

BMG*H105 Supervision and Organizational Behavior

BMG*H202 Principles of Management

BMG*H220 Human Resources Management 3

CSA*H145 Database Management

CSA*H207 Computer Applications in Management & Marketing

Elective Management (BBG*H295 recommended)

BMG*H202 Principles of Management

BMK*H201 Principles of Marketing

BMK*HH207 Consumer Behavior

CSA*H145 Database Management

CSA*HH207 Computer Applications in Management & Marketing

Marketing class (BBG*H295 recommended)

^oMAT*H137 and courses numbered lower than MAT*H137 will not transfer to Connecticut State Universities as Quantitative Reasoning courses.

^{oo}At least one Scientific Knowledge and Understanding OR Scientific Reasoning course must have a lab component.

BUSINESS FINANCE

This program is designed to provide students with a course of study which will prepare them to assume positions as support personnel in banking, real estate, the insurance industry, and corporate finance departments or non-profit organizations. It is envisioned as a career program. The primary goal of the Finance Program is to prepare students for entry level employment in the field. Also available is the Finance Certificate which is designed for individuals seeking professional advancement. Students are strongly urged to seek the advice of a counselor if they intend to pursue a baccalaureate degree or certificate in finance.

General Education Core course listings and definitions appear on pages 53-54. Placement testing will determine the sequencing of courses. Additional courses may be required.

Competency or Program Requirement	Course Number and Title	Required Credits
Aesthetic Dimensions/Written Communication	Choose any Aesthetic Dimensions/Written Communication listed	3
Continuing Learning and Information Literacy/Ethics	CSA*H105 Introduction to Software Applications or CSC*H101 Introduction to Computers	3
Critical Analysis and Logical Thinking/Written Communication	ENG*H101 Composition	3
Historical Knowledge	BBG*H231 Business Law I	3
Oral Communication	Choose any Oral Communication listed	3
Quantitative Reasoning	MAT*H167 Principles of Statistics	3
Scientific Knowledge ^o	Choose any Scientific Knowledge listed	3-4
Scientific Reasoning ^o	Choose any Scientific Reasoning listed	3-4
Social Phenomena	ECN*H101 Principles of Macroeconomics	3
Written Communication	Choose any Written Communication listed—Prefer ENG*H102 Literature and Composition or ENG*H200 Advanced Composition	3
Program Requirements	ACC*H113 Principles of Financial Accounting	3
	ACC*H117 Principles of Managerial Accounting	3
	BFN*H201 Principles of Finance	3
	BBG*H232 Business Law II	3
	ECN*H250 Money and Banking	3
	BMG*H202 Principles of Management	3
	BFN*H220 Financial Management	3
	BBG*H210 Business Communications	3
	ECN*H102 Microeconomics	3
Program Elective [†] :	3	

Program Outcomes

Upon successful completion of all program requirements, graduates will be able to:

1. Demonstrate knowledge of business finance including financial planning, long and short-term financing, fixed assets management and management of long-term debt.
2. Identify strategies and practices in government and consumer financing.
3. Demonstrate knowledge of monetary, fiscal and debt management policies of government.
4. Demonstrate knowledge of basic analytical techniques, problem-solving and decision-making.
5. Identify the basic concepts of Asset Management and be able to provide an overview of Liability-and Deposit-Management as they relate to the financial services industry.
6. Identify techniques for managing working capital and demonstrate knowledge of the capital budgeting process.
7. Provide an understanding of how the United States economic system is organized, how it functions and how it impacts the global economy.
8. Identify the major goals and functions of financial management.
9. Understand the principle components of financial analysis in all levels of the business organization.
10. Demonstrate an understanding of the interrelationships between Finance and all other areas within a business, including working with other departments, to achieve overall strategic goals.

Total Credits: 61-62

Any given course may only be used to satisfy one of the competency areas even if it is listed under more than one.

[†]Choose one of the following:

BFN*H125 Principles of Banking
 BFN*H126 Principles of Insurance
 BFN*H203 Principles of Investment
 BRE*H205 Real Estate Law
 BFN*H208 Financial Analysis
 BRE*H201 Real Estate Principles

[†]Selection of Finance courses should be made in consultation with Business faculty advisor.

^o At least one Scientific Knowledge and Understanding OR Scientific Reasoning course must have a lab component.

BUSINESS MANAGEMENT

The Business Management Program is intended to provide students with a broad background in the field of management. Students completing this program will be qualified to accept entry-level positions in a variety of profit and non-profit organizations.

Students who plan to transfer to a four-year college should choose electives which conform to the curricular patterns of the college in which they plan to enroll after receiving the associate in science degree.

General Education Core course listings and definitions appear on pages 53-54. Placement testing will determine the sequencing of courses. Additional courses may be required.

Competency or Program Requirement	Course Number and Title	Required Credits
Aesthetic Dimensions/Written Communication	Choose any Aesthetic Dimensions/ Written Communication listed	3
Continuing Learning and Information Literacy/Ethics	CSA*H105 Introduction to Software Applications or CSC*H101 Introduction to Computers	3
Critical Analysis and Logical Thinking/ Written Communication	ENG*H101 Composition	3
Historical Knowledge	BBG*H231 Business Law I	3
Oral Communication	Choose any Oral Communication listed	3
Quantitative Reasoning	MAT*H167 Principles of Statistics or MAT*H172 College Algebra	3
Scientific Knowledge ^o	Choose any Scientific Knowledge listed	3-4
Scientific Reasoning ^o	Choose any Scientific Reasoning listed	3-4
Social Phenomena	ECN*H101 Principles of Macroeconomics	3
Written Communication	Choose any listed - Prefer ENG*H102 Literature and Composition or ENG*H200 Advanced Composition	3
Program Requirements	ACC*H113 Principles of Financial Accounting	3
	ACC*H117 Principles of Managerial Accounting	3
	BBG*H101 Introduction to Business	3
	BBG*H232 Business Law II	3
	BMG*H202 Principles of Management	3
	BMG*H105 Supervision and Organizational Behavior	3
	BMG*H220 Human Resource Management	3
	BBG*H210 Business Communications	3
	ECN*H102 Microeconomics	3
Program Elective [†]	3	

Program Outcomes

Upon successful completion of all program requirements, graduates will be able to:

1. Demonstrate basic knowledge of management, human resources, and organizational development in an entry-level management position.
2. Identify the skills needed to organize thoughts and ideas and demonstrate the ability to communicate, verbally and in writing, in a manner that can be easily understood in the business environment.
3. Solve math problems related to various aspects of management including accounting, finance and operations.
4. Understand and practice the various functions of management as well as the nature and responsibilities of a manager.
5. Develop an understanding of the decision-making process and demonstrate effective decision-making.
6. Demonstrate an ability to define management problems, examine alternatives and decide on the best course of action, and submit these in writing to higher management.
7. Develop a personal philosophy of management, enabling him/her to perform as a manager, staff specialist or as a subordinate.
8. Develop an understanding of the nature of change and how to adapt to the accelerating, global environment.
9. Demonstrate a knowledge and use of technological innovations as they apply to management.
10. Develop an ability to interpret management information from various sources such as financial statements, annual reports, and publications.
11. Demonstrate an understanding of the competitive pressures brought by effectiveness, efficiency and innovation issues on organizations.
12. Demonstrate a responsible attitude in relationships with employers, fellow employees, working groups, and the macro environment.

Total Credits: 61-62

Any given course may only be used to satisfy one of the competency areas even if it is listed under more than one.

[†]Choose one of the following

BMK*H220 Sales
 BMK*H201 Principles of Marketing
 BMK*H207 Consumer Behavior
 BBG*H295 Management Cooperative Work Experience
 BFN*H201 Principles of Finance
 BFN*H203 Investment Principles
 BFN*H126 Principles of Insurance
 CSA*H105 Introduction to Software Applications

^o At least one Scientific Knowledge and Understanding OR Scientific Reasoning course must have a lab component.

COMPUTER-AIDED DRAFTING / DESIGN ENGINEERING TECHNOLOGY

Computer-aided design (CAD) is an advanced, rapidly evolving technology used by designers and engineers to create technical drawings and computer models. It is essential to many industries because drawings and computer models are required before any product can be manufactured. Examples include automobiles, aircraft, marine vessels, machinery, electronics, plastic parts, medical devices, bridges, buildings, and roads, to name a few. Because of its broad application, computer-aided design offers many employment opportunities for people who maintain up-to-date skills.

Computers have made conventional manual drawing and design methods obsolete, thereby fundamentally changing the process of technical documentation. CAD enables a designer to make rapid revisions in a drawing and to evaluate many potential solutions to a design problem, thereby allowing the best one to be selected. In contrast to traditional methods, the designer works with computer models of the complete three-dimensional geometry of an object, rather than the two-dimensional views required when drawing on a sheet of paper. These models allow viewing of the object from any direction and enable a designer to visualize the assembly and fit of complex parts. Although the departmental program emphasizes this new technology, intelligent use of the computer relies upon a thorough knowledge of the principles of engineering graphics and conventional drafting practices. Therefore, topics such as orthographic and isometric projection, section and auxiliary views, descriptive geometry and dimensioning continue to be the starting point for the curriculum. The departmental program combines comprehensive instruction in the use of several current CAD software systems with industrial practice. Employment opportunities include: CAD Draftsperson/Operator, Mechanical Draftsperson, Designer, Engineering Technician, and Technical Illustrator.

General Education Core course listings and definitions appear on pages 53-54. Additional courses may be required. The suggested sequence for full-time students is shown below.

Competency or Program Requirement	Course Number and Title	Required Credits
FIRST SEMESTER		
Continuing Learning/Information Literacy and Ethics	TCN*H101 Introduction to Engineering Technology	3
Critical Analysis and Logical Thinking/ Written Communication	ENG*H101 Composition	3
Quantitative Reasoning	MAT*H172 College Algebra	3
Program Requirement	MFG*H104 Manufacturing Processes	4
Program Requirement	CAD*H150 CAD 2D	3
SECOND SEMESTER		
Scientific Knowledge	CHE*H111 Concepts of Chemistry or CHE*H121 General Chemistry I [†]	4
Scientific Reasoning	PHY*H121 General Physics I	4
Written Communication	ENG*H102 Literature and Composition or ENG*H200 Advanced Composition or ENG*H202 Technical Writing (suggested)	3
Program Requirement	MAT*H185 Trigonometric Functions	3
Program Requirement	CAD*H200 3D CAD Modeling	4
THIRD SEMESTER		
Oral Communication	Choose any Oral Communications listed, COM*H173 suggested	3
Program Requirement	MEC*H114 Statics	3
Program Requirement	MFG*H106 Computer-Aided Manufacturing I	3
Program Requirement	CAD*H220 Parametric Design	3
Program Requirement	MFG*H210 Materials of Engineering	4
FOURTH SEMESTER		
Social Phenomena	Choose any Social Phenomena listed	3
Program Requirement	MFG*H275 Mechanics of Materials or MEC*H251 Materials Strength	3-4
Program Requirement	CAD*H275 CAD Animation Studio 3D Studio Max	4
Program Requirement	CAD*H294 Senior Project	4
Program Requirement	Choose One Directed Elective ^{††}	3

Total Credits: 67-68

Any given course may only be used to satisfy one of the competency areas even if it is listed under more than one.

[†]Choose if planning to transfer to a Bachelor's degree program

^{††}Directed Electives:

CAD*H285 Computer Integrated Manufacturing (CIM) I, CAD*H286 Advanced Modeling Techniques
EET*H102 Electrical Applications, MAT*H232 Applied Calculus, MAT*H254 Calculus I, MFG*H201 Computer Aided Manufacturing II

Program Outcomes

Upon successful completion of all program requirements, graduates will be able to:

1. Have a thorough knowledge and understanding of CAD tools and processes.
2. Demonstrate team-oriented human skills that permit effective participation in multicultural work and social environments.
3. Apply appropriate mathematical and scientific principles to CAD applications, particularly descriptive geometry.
4. Demonstrate a thorough knowledge and understanding of engineering graphics and conventional drafting practices such as orthographic and isometric projection, section, detail, auxiliary views, and geometric dimensioning and tolerancing.
5. Demonstrate the ability to develop an engineering concept through the detail design process and produce professionally finished engineering drawings suitable for use in manufacturing.
6. Be able to work with specialists to resolve technical problems in design, manufacturing engineering, quality assurance, and production.
7. Demonstrate a high level of proficiency in the use of state-of-the-art CAD software and be able to adapt to new CAD systems as they are developed.
8. Demonstrate a thorough understanding of 3-dimensional solid modeling concepts, procedures, and applications.
9. Be aware of new developments in CAD and related areas, and assimilate new technologies as they emerge.
10. Be able to organize activities and perform work in an efficient, accurate manner.
11. Apply knowledge of computer applications including word processing, spreadsheets, and other software related to CAD processes.

Also see:

Electronic Engineering Technology
Engineering Technology
Manufacturing (Automated) Engineering Technology
Mechanical Engineering Technology

COMPUTER INFORMATION SYSTEMS TECHNOLOGY

The Computer Information Systems program is built on a foundation of strong technical knowledge in information systems. The program emphasizes the areas of computer programming, database systems, computer networking, network security, project management and systems analysis. It also reinforces a broad understanding of other disciplines related to information systems, such as accounting, math, management, and communication. The CIS program allows students to tailor their degree to their interests by offering a wide range of electives. Certificates are also provided as a guide to assist students in the selection of electives. Many classes are fully mapped to industry certifications. The CIS Department is located in Technology Hall, a 100,000 sq. ft. facility on the eastern side of the NVCC campus. Classes are held in Smart classrooms featuring instructors' workstations that control an advanced classroom audio visual presentation system. Every CIS classroom also includes student workstations with state-of-the-art computers. The CIS Department also has three specialized Smart classrooms that are dedicated to the Networking courses and are connected to an adjacent Server Room.

General Education Core course listings and definitions appear on pages 53-54. Placement testing will determine the sequencing of courses. Additional courses may be required.

Competency or Program Requirement	Course Number and Title	Required Credits
Aesthetic Dimensions/Written Communication	Choose any Aesthetic Dimensions/Written Communication listed	3
Continuing Learning and Information Literacy/Ethics	CSC*H101 Introduction to Computers	3
Critical Analysis and Logical Thinking/Written Communication	ENG*H101 Composition	3
Historical Knowledge	Choose any Historical Knowledge listed	3
Oral Communication	Choose any Oral Communication listed	3
Quantitative Reasoning	MAT*H167 Principles of Statistics or MAT*H172 College Algebra or higher	3
Scientific Knowledge ^o	Choose any Scientific Knowledge listed	4
Scientific Reasoning ^o	CSC*H250 Systems Analysis and Design or CSC*H252 Project Management	3
Social Phenomena	Choose any Social Phenomena listed	3
Written Communication	Choose any Written Communication listed—Prefer ENG*H102 Literature and Composition or ENG*H200 Advanced Composition	3
Program Requirements	CST*H130 Networking Essentials I	3
	CSC*H205 Visual Basic or CSC*H113 Programming I	3
	CST*H120 Introduction to Operating Systems	3
	CSC*H231 Database Design I	3
	ACC*H113 Principles of Financial Accounting	3
	CSC Programming Elective [†]	3
	CSC Programming Electives ^{††}	12

Total Credits: 61

Any given course may only be used to satisfy one of the competency areas even if it is listed under more than one.

[†]Choose one of the following:

CSC*H206 VISUAL BASIC II
 CSC*H211 VB & ASP .NET Web Programming
 CSC*H213 Object-Oriented Programming Using C++
 CSC*H214 Advanced C++ Programming
 CSC*H217 Object-Oriented Programming Using C#
 CSC*H220 Object-Oriented Programming Using JAVA
 CSC*H227 Web Programming with JAVA
 CSC*H228 Mobile Device Programming
 CSC*H229 Programming II
 CSC*H232 Database Design II
 CSC*H237 Database Programming with VB.NET 3

^o At least one Scientific Knowledge and Understanding OR Scientific Reasoning course must have a lab component.

^{††}Choose four of the following:

CSC*H205 Visual Basic I or CSC*H113 Programming I
 (if both are taken, one can be used to meet the 4 elective requirement)
 CSC*H206 VISUAL BASIC II
 CSC*H211 VB & ASP .NET Web Programming
 CSC*H213 Object-Oriented Programming Using C++
 CSC*H214 Advanced C++ Programming
 CSC*H217 Object-Oriented Programming Using C#
 CSC*H220 Object-Oriented Programming Using JAVA
 CSC*H227 Web Programming with Java
 CSC*H228 Mobile Device Programming
 CSC*H229 Programming II
 CSC*H232 Database Design II
 CSC*H237 Database Programming with VB.NET 3
 CSC*H183 Information Systems in Organizations
 CSC*H236 Introduction to Client/Server Systems
 CSC*H252 Information Systems Project Management
 CSC*H295 Co-op Education Work Experience
 CST*H235 Network Systems
 CST*H236 Advanced Network Systems
 CST*H239 Servicing & Support of Local Area Networks
 CST*H248 Practices in Security Management
 CST*H274 Network Security Technology
 ACC*H117 Principles of Managerial Accounting

Program Outcomes

Upon successful completion of all program requirements, graduates will be able to:

1. Demonstrate desirable attitudes and work habits—creative thinking, the ability to solve problems, cooperation, good judgment, responsibility, and self-reliance.
2. Understand and respect the employer-employee relationship and appreciate the need to produce high quality work.
3. Communicate clearly, both verbally and in writing.
4. Demonstrate sufficient understanding of information technology for entry-level employment and advancement in the field.
5. Demonstrate a commitment to professional organizations through attending meetings, seminars, and continuing education programs.
6. Apply knowledge of interpersonal and motivational skills and communication techniques learned in English, speech, psychology, and social sciences when working with customers, peers, and subordinates.
7. Develop sound ethical, philosophical, and moral professional characteristics.
8. Demonstrate a responsible attitude in relationships with employers, fellow employees, and toward the working environment.
9. Acquire a level of math skills appropriate for student's area of concentration.
10. Be able to list and describe emerging technologies.

CRIMINAL JUSTICE/PUBLIC SAFETY

The Criminal Justice/Public Safety Program provides training for career opportunities in law enforcement and policing, and also offers a broad liberal arts education for those students who wish to transfer their earned college credits from the program to four-year academic institutions. Five options are offered in the Program: Corrections, Law Enforcement, Security, Computer Crime Deterrence, and Forensics. Each of these options is in a growing field with increasing opportunities for employment. Although all five options are included in the same program, they offer the student a diverse choice of career fields. These options are explained on the following pages.

Cooperative Work Experience

One of the special characteristics of the program is the Cooperative Work Experience, whereby the student, under professional supervision, actually engages in practical hands-on training in the Criminal Justice/Public Safety area of his or her choice. The Cooperative Work Experience is an integral and required part of the Criminal Justice/Public Safety curriculum. All students are required to take one semester of Co-op. The Co-op usually takes place during the second semester of the second year, after the student has satisfied all of the prerequisites. The Co-op experience allows students who have successfully met eligibility criteria to integrate and apply classroom theory to the field-based setting. Students participate under the supervision of qualified professionals in Criminal Justice/Public Safety organizations. The Coordinator of the Criminal Justice/Public Safety Program or the Division Director should approve all Co-op placements. Students in the Criminal Justice/Public Safety Program should consult with the coordinator of the program before registering for courses, especially for the choice of electives and the cooperative work experience.

General Education Core course listings and definitions appear on pages 53-54. Placement testing will determine the sequencing of courses. Additional courses may be required.

Competency or Program Requirement	Course Number and Title	Required Credits
Aesthetic Dimensions/Written Communications	Choose any Aesthetic Dimensions/Written Communications listed	3
Continuing Learning and Information Literacy/Ethics	Choose any Continuing Learning and Information Literacy/Ethics listed	3
Critical Analysis and Logical Thinking/Written Communication	ENG*101 Composition	3
Historical Knowledge	Choose any Historical Knowledge listed	3
Oral Communication	COM*100 Introduction to Communications or COM*173 Public Speaking	3
Quantitative Reasoning	MAT*167 Principles of Statistics [†]	3
Scientific Knowledge [◊]	BIO*105 Introduction to Biology	4
Scientific Reasoning [◊]	DAR*158 Biology of Addiction	3
Social Phenomena	SOC*101 Principles of Sociology	3
Written Communication	ENG102 Literature and Composition	3
Program Requirements	CJS*H101 Introduction to Criminal Justice	3
	CJS*H102 Introduction to Corrections	3
	CJS*H103 Introduction to Security	3
	CJS*H105 Introduction to Law Enforcement	3
	CJS*H211 Criminal Law	3
	CJS*H217 American Legal Systems	3
	CJS*H220 Criminal Investigation	3
	CJS*H293 Criminal Justice Cooperative Work Experience ^{††}	3
	SOC*H240 Criminology	3
CJS*H210 Constitutional Law	3	

Total Credits: 60-62

Any given course may only be used to satisfy one of the competency areas even if it is listed under more than one.

[†]Students planning to transfer to a 4-year school should plan to complete MAT*H167 Principles of Statistics or MAT*H172 College Algebra.

^{††}Placement is required. Students need to contact the program coordinator or the Liberal Arts and Behavioral/Social Sciences Division early in the semester prior to taking the course.

[◊] At least one Scientific Knowledge and Understanding OR Scientific Reasoning course must have a lab component.

Program Outcomes

Upon successful completion of all program requirements, graduates will be able to:

1. Given a set of circumstances and occurrences, present a well written investigative report and any accompanying documents.
2. Explain the basic structure and functions of the American Criminal Justice System.
3. Explain the structure of the Federal and State court systems.
4. Identify the functions and services of private security.
5. Explain the computer crime problem.
6. Explain the development of probation, parole and community supervision.
7. Explain the development of the corrections system in the United States.
8. Explain what effects the social conditions in the United States have upon the criminal justice system.
9. Read and explain relevant literature in the field of Criminal Justice.
10. Demonstrate the various methods of taking written statements and confessions.
11. Define the term investigation and the objectives of a criminal investigation.
12. State the psychological theories that may explain criminal behavior.
13. Identify the major sociological theories of criminal behavior.
14. Describe and evaluate the ways in which data are collected on crimes, criminals, and victims.
15. Present oral reports before a group.
16. Explain some of the basic issues and problems in policing, the courts, and corrections in America today.
17. Explain the Bill of Rights and those specific rights guaranteed by the First, Fourth, Fifth, Sixth, Eighth and Fourteenth Amendments.
18. Explain the contributions of both the classical and positivist schools of criminology.
19. Show how events in early American history influenced the development of the American Criminal Justice System.
20. Explain what bearing state and local political issues have on the Criminal Justice System.
21. Explain the concept of criminal law, including its purpose as an agent of social control.
22. Define and explain the elements which identify the offenses of: assault, sex crimes, burglary, arson, larceny, robbery and homicide.
23. Explain how state and local law enforcement agencies originated in the United States and how they currently function.
24. Identify the areas that establish a police officer's authority for arrest.
25. Demonstrate work skills relevant to a criminal justice agency.
26. Integrate the theoretical and practical application of the Criminal Justice Program.

CRIMINAL JUSTICE/PUBLIC SAFETY

Computer Crime Deterrence Option • THIS PROGRAM IS NOT ACCEPTING NEW STUDENTS

The program provides an excellent preparation for students to obtain entry-level positions in the field of computer crime deterrence. It also provides preparation and assistance to students for successful transfer to other institutions of higher education. Work has already begun to strengthen articulation agreements with four-year colleges.

Specifically, the Computer Crime Deterrence Option is designed to prepare students for the successful transfer to other institutions of higher learning as well as for entry level job opportunities in the field of law enforcement and computer security. It provides the essential skills required to gain and to maintain employment at entry level positions as police officers on the state and local level, Federal law enforcement officers, computer crime investigators and computer security specialists.

General Education Core course listings and definitions appear on pages 53-54. Placement testing will determine the sequencing of courses. Additional courses may be required.

Course Type	Course Number & Title	Cr.	Program Outcomes
Core Communications	COM*H100 Introduction to Communications	3	<p><i>Upon successful completion of all program requirements, graduates will be able to:</i></p> <ol style="list-style-type: none"> 1. Given a set of circumstances and occurrences, present a well written investigative report and any other accompanying documents. 2. Explain the basic structure and functions of the American Criminal Justice System. 3. Understand the growing dependence and reliance on personal computers in our society. 4. Understand the uses of database management software and its applicability to the business environment. 5. Identify a variety of Network Operating System Software and the features and functionality each provides. 6. Discuss the various problems encountered in the area of information security. 7. Identify current strategies used to protect data. 8. List and describe some of the more common viruses that have infected computer systems. 9. Develop security measures to neutralize various threats and risks. 10. Describe several forms of computer hacking. 11. Explain the purpose and use of the memory management software. 12. Explain various Network Operating Systems (NOS) used in Local Area Networks (LANS). 13. Identify the major sociological theories of criminal behavior. 14. Explain the Bill of Rights and those specific rights guaranteed by the First, Fourth, Fifth, Sixth, Eight and Fourteenth Amendments. 15. Explain the contributions of both the classical and positivist schools of criminology. 16. Explain the concept of criminal law, including its purpose as an agent of social control. 17. Identify methods used to safeguard information. 18. Discuss the legal issues affecting the recovery of evidence during investigations involving the Internet. 19. List and describe the civil liability issues associated with Internet investigations. 20. Explain the investigative process as it relates to computer crime. 21. Explain the problem of establishing a crime scene for a computer crime. 22. Demonstrate work skills relevant to a criminal justice agency. 23. Discuss the concepts of offensive and defensive information warfare. 24. Describe the various information warfare technologies. 25. Explain how information warfare helped to win the Gulf War. 26. Explain how information can be pirated and what can be done about it.
Core Communications	ENG*H101 Composition	3	
Core Humanities	ENG*H102 Literature and Composition	3	
Core Mathematics	MAT*H135 Topics in Contemporary Mathematics <i>or</i> higher (except MAT*H137) [†]	3	
Core Science	BIO*H105 Introduction to Biology <i>or</i> BIO*H115 Human Biology <i>or</i> PHY*H110 Introduction to Physics	4	
Core Behavioral Science	SOC*H101 Principles of Sociology	3	
Program Behavioral Science	SOC*H240 Criminology	3	
Program Behavioral Science	Any Sociology (SOC) course	3	
Program Behavioral Science	PSY*H111 General Psychology I	3	
Core Social Science	HIS*H201 U.S. History I <i>or</i> POL*H112 State & Local Government	3	
Core Arts or Humanities	PHL*H111 Ethics	3	
Program Business	CSC*H101 Introduction to Computers	3	
Program Business	CST*H120 Introduction to Operating Systems	3	
Program Requirement	CJS*H101 Introduction to Criminal Justice	3	
Program Requirement	CJS*H211 Criminal Law I	3	
Program Requirement	CJS*H217 American Legal Systems	3	
Program Requirement	CJS*H224 Computer Crimes	3	
Program Requirement	CJS*H234 Computer Security & Data Protection	3	
Program Requirement	CJS*H235 Information Warfare & Security	3	
Program Requirement	CJS*H293 Criminal Justice Cooperative Work Experience ^{**}	3	

Total Credits: 61

[†]Students planning to transfer to a 4-year school should plan to complete MAT*H167 Principles of Statistics or MAT*H172 College Algebra.

^{**}Placement is required. Students need to contact the program coordinator or the Liberal Arts and Behavioral/Social Sciences Division early in the semester prior to taking the course.

Associate Degree Programs

CRIMINAL JUSTICE/PUBLIC SAFETY**Corrections Option**

The modern Corrections System needs people with ability, sensitivity and professional training. The Corrections Option provides training for career opportunities in Corrections and also offers a broad liberal arts education for those students who wish to transfer their earned college credits from the program to four-year academic institutions. To be admitted formally to the program, a student must complete all prerequisite courses (if applicable) and must pass CJS*H101 Introduction to Criminal Justice with a minimum grade of "C". Employment opportunities after successful training in the Corrections Option include, but are not limited to, Corrections Officer, Corrections Administration, Probation Officer, Parole Officer and Correctional Counselor.

General Education Core course listings and definitions appear on pages 53-54. Placement testing will determine the sequencing of courses. Additional courses may be required.

Competency or Program Requirement	Course Number and Title	Required Credits
Aesthetic Dimensions/Written Communications	Choose any Aesthetic Dimensions/ Written Communications listed	3
Continuing Learning and Information Literacy/Ethics	Choose any Continuing Learning and Information Literacy/Ethics listed	3
Critical Analysis and Logical Thinking/ Written Communication	ENG*H101 Composition	3
Historical Knowledge	Choose any Historical Knowledge listed	3
Oral Communication	COM*H100 Introduction to Communications or COM*173 Public Speaking	3
Quantitative Reasoning	MAT*H167 Principles of Statistics [†]	3
Scientific Knowledge [◊]	BIO*H105 Introduction to Biology	4
Scientific Reasoning [◊]	DAR*H158 Biology of Addiction	3
Social Phenomena	SOC*H101 Principles of Sociology	3
Written Communication	ENG*H102 Literature and Composition	3
Program Requirements	CJS*H101 Introduction to Criminal Justice	3
	CJS*H102 Introduction to Corrections	3
	CJS*H261 Victim and Offender Mediation	3
	CJS*H246 Juvenile Corrections	3
	CJS*H211 Criminal Law I	3
	CJS*H217 American Legal Systems	3
	CJS*H241 Correctional Counseling I	3
	CJS*H293 Criminal Justice Cooperative Work Experience ^{††}	3
	SOC*H240 Criminology	3
CJS*H244 Community Based Corrections	3	

Total Credits: 61

Any given course may only be used to satisfy one of the competency areas even if it is listed under more than one.

[†]Students planning to transfer to a 4-year school should plan to complete MAT*H167 Principles of Statistics or MAT*H172 College Algebra.

^{††}Placement is required. Students need to contact the program coordinator or the Liberal Arts and Behavioral/Social Sciences Division early in the semester prior to taking the course.

[◊] At least one Scientific Knowledge and Understanding OR Scientific Reasoning course must have a lab component.

Program Outcomes

Upon successful completion of all program requirements, graduates will be able to:

1. Present a well written investigative report and any other accompanying documents when given a set of circumstances and occurrences.
2. Explain the basic structure and functions of the American Criminal Justice System.
3. Explain the structure of the federal and state court systems.
4. Explain the development of probation, parole and community supervision.
5. Explain the development of the correctional system in the United States.
6. Explain the role of the victim in rehabilitating the offender.
7. Identify methods used to manage conflict.
8. Explain what effects the social conditions in the United States have upon the criminal justice system.
9. Read and explain relevant literature in the field of criminal justice.
10. Explain the development of the juvenile corrections system.
11. Explain the specific problems of juveniles in the criminal justice system.
12. State the psychological theories that may explain criminal behavior.
13. Identify the major sociological theories of criminal behavior.
14. Describe and evaluate the ways in which data are collected on crimes, criminals and victims.
15. Present oral reports before a group.
16. Explain the Bill of Rights and those specific rights guaranteed by the First, Fourth, Fifth, Sixth, Eighth, and Fourteenth Amendments.
17. Explain some of the basic issues and problems in policing, the courts, and corrections in America today.
18. Explain the contributions of both the classical and positivist schools of criminology.
19. Show how events from early American history influenced the development of the American Criminal Justice System.
20. Explain the concept of criminal law, including its purpose as an agent of social control.
21. Define and explain the element of: assault, sex crimes, burglary, arson, larceny, robbery and homicide.
22. List the various forms of intervention techniques available in corrections.
23. Explain how correctional counseling works.
24. Demonstrate work skills relevant to a criminal justice agency.
25. Integrate the theoretical and practical applications of the Criminal Justice Program.
26. List alternatives to incarceration that are now in use.
27. Explain the concept of community corrections.

Criminal Justice/Public Safety

Forensics Option

The Forensics Option is a two-pronged approach to employment in the Criminal Justice field. On the one hand, the Option will prepare students for entry-level employment in the field of law enforcement on the local, state, and federal level. On the other hand, the Option will prepare students for successful transfer to other institutions of higher learning where they will obtain the baccalaureate degree necessary for employment in criminal laboratories.

The program will provide an academic and learning experience that promotes common sense, ethics, civic responsibility, cultural appreciation, and respect for diversity. These characteristics are inherent issues and will be discussed in every required course in the program. The program has a strong connection with the community. Representatives of some area agencies such as the State Police Crime Lab have served as advisors in the development of the program to ensure that it contributes to the production of an educated and trained work force that responds to the needs of the region.

Specifically, the Forensics Option is designed to prepare students for the successful transfer to other institutions of higher learning as well as for entry level job opportunities in the field of law enforcement. It provides the essential skills required to gain and to maintain employment at entry level positions as police officers on the state and local level as well as Federal law enforcement officers.

General Education Core course listings and definitions appear on pages 53-54. Placement testing will determine the sequencing of courses. Additional courses may be required.

Competency or Program Requirement	Course Number and Title	Required Credits
Aesthetic Dimensions/Written Communications	Choose any Aesthetic Dimensions/ Written Communications listed	3
Continuing Learning and Information Literacy/Ethics	Choose any Continuing Learning and Information Literacy/Ethics listed	3
Critical Analysis and Logical Thinking/ Written Communication	ENG*101 Composition	3
Historical Knowledge	Choose any Historical Knowledge listed	3
Oral Communication	COM*100 Introduction to Communications or COM*173 Public Speaking	3
Quantitative Reasoning	MAT*167 Principles of Statistics [†]	3
Scientific Knowledge [°]	BIO*105 Introduction to Biology	4
Scientific Reasoning [°]	DAR*158 Biology of Addiction	3
Social Phenomena	SOC*101 Principles of Sociology	3
Written Communication	ENG102 Literature and Composition	3
Program Requirements	CJS*H101 Introduction to Criminal Justice	3
	CJS*225 Forensic Science	3
	CJS*H229 Crime Scene Investigation	3
	CJS*H105 Introduction to Law Enforcement	3
	CJS*H211 Criminal Law	3
	CJS*H217 American Legal Systems	3
	CJS*H255 Ethical Issues in Criminal Justice	3
	CJS*H293 Criminal Justice Cooperative Work Experience ^{††}	3
	SOC*H240 Criminology	3
Criminal Justice Directed Elective	3	

Total Credits: 61

Any given course may only be used to satisfy one of the competency areas even if it is listed under more than one.

[†]Students planning to transfer to a 4-year school should plan to complete MAT*H167 Principles of Statistics or MAT*H172 College Algebra.

^{††}Placement is required. Students need to contact the program coordinator or the Liberal Arts and Behavioral/Social Sciences Division early in the semester prior to taking the course.

[°] At least one Scientific Knowledge and Understanding OR Scientific Reasoning course must have a lab component.

Program Outcomes

The Criminal Justice/Public Safety graduate should be able to:

1. Given a set of circumstances and occurrences, present a well written investigative report and any other accompanying documents.
2. Explain the basic structure and functions of the American Criminal Justice System.
3. Explain the structure of the Federal and State court systems.
4. Manage a crime scene.
5. Recognize evidence at a crime scene.
6. Collect, preserve and package evidence.
7. Mark and record evidence.
8. Discuss the capabilities of the crime lab.
9. Explain the concept of transfer of evidence.
10. Conduct basic laboratory analysis.
11. Conduct field tests.
12. Identify and describe a crime scene.
13. Discuss the capabilities of various pieces of equipment used at a crime scene.
14. Conduct a crime scene search.
15. Name the types of evidence
16. Describe the "linkage triangle" for physical evidence.
17. Explain what effects the social conditions in the United States have upon the criminal justice system.
18. Read and explain relevant literature in the field of Criminal Justice.
19. List the major categories of physical evidence.
20. Explain the difference between class and individual characteristics of physical evidence.
21. Explain the legal requirements effecting the crime scene.
22. Explain the concept of chain of custody.
23. Explain the scientific requirements effecting the crime scene.
24. Explain the responsibilities of the first responder at the crime scene.
25. State the psychological theories that may explain criminal behavior.
26. Identify the major sociological theories of criminal behavior.
27. Describe and evaluate the ways in which data are collected on crimes criminals and victims.
28. Present oral reports before a group.
29. Explain the Bill of Rights and those specific rights guaranteed by the First, Fourth, Fifth, Sixth, Eight and Fourteenth Amendments.
30. Explain some of the basic issues and problems in policing, the courts, and corrections in America today.
31. Explain what bearing state and local political issues have on the criminal justice system.
32. Explain the concept of criminal law, including its purpose as an agent of social control.
33. Define and explain the elements of: assault, sex crimes, burglary, arson, larceny, robbery and homicide.
34. Demonstrate work skills relevant to a criminal justice agency.
35. Integrate the theoretical and practical application of the Criminal Justice Program.
36. Explain the impact of the development of ethical thought on the Criminal Justice System.

Associate Degree Programs

CRIMINAL JUSTICE/PUBLIC SAFETY**Law Enforcement Option**

The field of law enforcement needs people with ability, sensitivity and professional training. The Law Enforcement Option provides training for career opportunities in law enforcement and policing and also offers a broad liberal arts education for those students who wish to transfer their earned college credits from the program to four-year academic institutions. To be admitted formally to the program, a student must complete all prerequisite courses (if applicable) and must pass CJS*H101 Introduction to Criminal Justice with a minimum grade of "C". Employment opportunities after successful training in the Law Enforcement Option include, but are not limited to, municipal and state police officers, federal law enforcement officers, environmental protection enforcement officers, fish and game wardens, and court investigators. The general objective of the option is to prepare students for jobs in the law enforcement field or to transfer to a baccalaureate degree program.

Connecticut Police Academy Graduate

Successful graduates of the Connecticut Police Academy are granted a maximum of nine (9) credits toward their degree in the Criminal Justice/Public Safety Program. Graduates from the Academy are granted credits for CJS*H220 Criminal Investigation, CJS*H105 Introduction to Law Enforcement, and CJS*H293 Criminal Justice Cooperative Work Experience, with an additional eighty (80) hours of field work and appropriate scholarly paper.

General Education Core course listings and definitions appear on pages 53-54. Placement testing will determine the sequencing of courses. Additional courses may be required.

Competency or Program Requirement	Course Number and Title	Required Credits
Aesthetic Dimensions/Written Communications	Choose any Aesthetic Dimensions/Written Communications listed	3
Continuing Learning and Information Literacy/Ethics	Choose any Continuing Learning and Information Literacy/Ethics listed	3
Critical Analysis and Logical Thinking/Written Communication	ENG*101 Composition	3
Historical Knowledge	Choose any Historical Knowledge listed	3
Oral Communication	COM*100 Introduction to Communications or COM*173 Public Speaking	3
Quantitative Reasoning	MAT*167 Principles of Statistics [†]	3
Scientific Knowledge [◊]	BIO*105 Introduction to Biology	4
Scientific Reasoning [◊]	DAR*158 Biology of Addiction	3
Social Phenomena	SOC*101 Principles of Sociology	3
Written Communication	ENG102 Literature and Composition	3
Program Requirements	CJS*H101 Introduction to Criminal Justice	3
	CJS*H210 Constitutional Law	3
	CJS*220 Criminal Investigation	3
	CJS*H105 Introduction to Law Enforcement	3
	CJS*H211 Criminal Law I	3
	CJS*H217 American Legal Systems	3
	CJS*H255 Ethical Issues in Criminal Justice	3
	CJS*H293 Criminal Justice Cooperative Work Experience ^{**}	3
	SOC*H240 Criminology	3
CJS*H280 Victimology	3	

Total Credits: 61

Any given course may only be used to satisfy one of the competency areas even if it is listed under more than one.

[†]Students planning to transfer to a 4-year school should plan to complete MAT*H167 Principles of Statistics or MAT*H172 College Algebra.

^{**}Placement is required. Students need to contact the program coordinator or the Liberal Arts and Behavioral/Social Sciences Division early in the semester prior to taking the course.

[◊] At least one Scientific Knowledge and Understanding OR Scientific Reasoning course must have a lab component.

Program Outcomes

Upon successful completion of all program requirements, graduates will be able to:

1. Present a well written investigative report and any other accompanying documents when given a set of circumstances and occurrences.
2. Explain the basic criminal justice structure and functions of the American Criminal Justice System.
3. Explain the structure of the federal and state court systems.
4. Explain how state and local law enforcement agencies originated in the United States and how they currently function.
5. Identify the areas that establish a police officer's authority to arrest.
6. Explain the concept of victim's rights.
7. Explain how a criminal selects a victim.
8. Explain what effects the social conditions in the United States have upon the criminal justice system.
9. Read and explain relevant literature in the field of criminal justice.
10. Demonstrate the various investigation methods of taking written statements and confessions.
11. Define the term investigation and the objectives of a criminal investigation.
12. State the psychological theories that may explain criminal behavior.
13. Identify the major sociological theories of criminal behavior.
14. Describe and evaluate the ways in which data are collected on crimes, criminals and victims.
15. Present oral reports before a group.
16. Explain the Bill of Rights and those specific rights guaranteed by the First, Fourth, Fifth, Sixth, Eighth and Fourteenth Amendments.
17. Explain some of the basic issues and problems in policing, the courts, and corrections in America today.
18. Explain the contributions of both the classical and positivist schools of criminology.
19. Show how events from early American history influenced the development of the American Criminal Justice System.
20. Explain the concept of criminal law, including its purpose as an agent of social control.
21. Define and explain the elements of: assault, sex crimes, burglary, arson, larceny, robbery and homicide.
22. List and explain the constitutional law relevant to Supreme Court cases regarding search and seizure.
23. List and explain the Miranda Warnings.
24. Demonstrate work skills relevant to a criminal justice agency.
25. Integrate the theoretical and practical application of the Criminal Justice Program.
26. Explain the corruption hazards faced by law enforcement officers.
27. Recite and explain the Law Enforcement Officers' Code of Ethics.

CRIMINAL JUSTICE/PUBLIC SAFETY

Security Option

The security industry needs people with ability, sensitivity and professional training. The Security Option provides training for career opportunities in the security industry and also offers a broad liberal arts education for those students who wish to transfer their earned college credits from the program to four-year academic institutions. To be admitted formally to the program, a student must complete all prerequisite courses (if applicable) and must pass CJS*H101 Introduction to Criminal Justice with a minimum grade of “C”. Employment opportunities after successful training in the Security Option include, but are not limited to, retail security, physical security, corporate security, private investigations, executive protection, loss prevention, surveillance and undercover operations. The general objective of the option is to prepare students for jobs in the security field or to transfer to a baccalaureate degree program.

General Education Core course listings and definitions appear on pages 53-54. Placement testing will determine the sequencing of courses. Additional courses may be required.

Competency or Program Requirement	Course Number and Title	Required Credits
Aesthetic Dimensions/Written Communications	Choose any Aesthetic Dimensions/ Written Communications listed	3
Continuing Learning and Information Literacy/Ethics	Choose any Continuing Learning and Information Literacy/Ethics listed	3
Critical Analysis and Logical Thinking/ Written Communication	ENG*H101 Composition	3
Historical Knowledge	Choose any Historical Knowledge listed	3
Oral Communication	COM*H100 Introduction to Communications or COM*173 Public Speaking	3
Quantitative Reasoning	MAT*H167 Principles of Statistics [†]	3
Scientific Knowledge [°]	BIO*H105 Introduction to Biology	4
Scientific Reasoning [°]	DAR*H158 Biology of Addiction	3
Social Phenomena	SOC*H101 Principles of Sociology	3
Written Communication	ENG*H102 Literature and Composition	3
Program Requirements	CJS*H101 Introduction to Criminal Justice	3
	CJS*H218 Legal Aspects of Security	3
	CJS*103 Introduction to Security	3
	CJS*H230 Security Management	3
	CJS*H211 Criminal Law I	3
	CJS*H217 American Legal Systems	3
	CJS*H232 Industrial and Retail Security	3
	CJS*H293 Criminal Justice Cooperative Work Experience ^{††}	3
	SOC*H240 Criminology	3
CJS*H233 Institutional Security	3	

Total Credits: 61

Any given course may only be used to satisfy one of the competency areas even if it is listed under more than one.

[†]Students planning to transfer to a 4-year school should plan to complete MAT*H167 Principles of Statistics or MAT*H172 College Algebra.

^{††}Placement is required. Students need to contact the program coordinator or the Liberal Arts and Behavioral/Social Sciences Division early in the semester prior to taking the course.

[°] At least one Scientific Knowledge and Understanding OR Scientific Reasoning course must have a lab component.

Program Outcomes

Upon successful completion of all program requirements, graduates will be able to:

1. Present a well written investigative report and any other accompanying documents when given a set of circumstances and occurrences.
2. Explain the basic structure and functions of the American Criminal Justice System.
3. Explain the structure of the federal and state court systems.
4. Identify the functions and services of private security.
5. Explain the computer crime problem.
6. Explain how institutional security may differ from other types of security.
7. Explain the various security systems in use in institutional establishments.
8. Read and explain relevant literature in the field of criminal justice.
9. Explain the problems of theft from industrial and retail establishments.
10. Explain the various security systems in use in industrial and retail establishments.
11. State the psychological theories that may explain criminal behavior.
12. Identify the major sociological theories of criminal behavior.
13. Describe and evaluate the ways in which data are collected on crimes, criminals and victims.
14. Present oral reports before a group.
15. Explain the Bill of Rights and those specific rights guaranteed by the First, Fourth, Fifth, Sixth, Eighth and Fourteenth Amendments.
16. Explain some of the basic issues and problems in policing, the courts, and corrections in America today.
17. Explain the contributions of both the classical and positivist schools of criminology.
18. Show how events from early American history influenced the development of the American Criminal Justice System.
19. Explain the concept of criminal law, including its purpose as an agent of social control.
20. Define and explain the elements of: assault, sex crimes, burglary, arson, larceny, robbery and homicide.
21. List and explain some of the legal problems that may be encountered in the field of security.
22. Explain the problem of liability as it applies to the field of security.
23. Demonstrate work skills relevant to a criminal justice agency.
24. Integrate the theoretical and practical application of the Criminal Justice Program.
25. Explain the legal problems encountered in security management and supervision.
26. Explain the supervision practices used in the security field.

Associate Degree Programs

CYBERSECURITY

The program provides preparation for students to obtain entry-level positions in the field of cybersecurity and computer crime deterrence. It also provides preparation and assistance to students for successful transfer to other institutions of higher education. It provides essential skills required to gain and to maintain employment at entry level positions as computer crime investigators, computer security specialists, and federal law enforcement officers. This new program combines elements of both NVCC's Criminal Justice and Computer Information Systems programs to offer students a strong grounding in understanding the investigative nature of cybersecurity in the criminal justice realm as well as gaining technical skills in computer science networking and programming.

General Education Core course listings and definitions appear on pages 53-54. Placement testing will determine the sequencing of courses. Additional courses may be required.

Competency or Program Requirement	Course Number and Title	Required Credits
Aesthetic Dimensions/Written Communications	Choose any Aesthetic Dimensions/ Written Communications listed	3
Continuing Learning and Information Literacy/Ethics	CSC*H101 Introduction to Computers	3
Critical Analysis and Logical Thinking/ Written Communication	ENG*101 Composition	3
Historical Knowledge	BBG*H231 Business Law	3
Oral Communication	Choose any Oral Communications listed	3
Quantitative Reasoning	MAT*167 Principles of Statistics [†]	3
Scientific Knowledge [°]	Choose any Scientific Knowledge listed	4
Scientific Reasoning	CSC*H252 Information Systems Project Management	3
Social Phenomena	PSY*H111 General Psychology I	3
Written Communication	Choose any Written Communication listed	3
Program Requirements	CST*H130 Network Essentials I	3
	CST*H274 Network Security and Technology	3
	CST*H120 Introduction to Operating Systems or CSC Elective Any Programming, Operating Systems, Networking or Database course	3
	FTA*H272 Terrorism, First Responders or CST or CSC Elective Any Programming, Operating Systems, Networking or Database course	3
	PSY*H217 Psychology of Criminal Behavior	3
	CST*H248 Practices in Security Management	3
	CJS*H101 Introduction to Criminal Justice	3
	CJS*H224 Computer Crimes	3
	CJS*H234 Computer Security and Data Protection	3
	CJS*H235 Information Warfare and Security	3

Total Credits: 61

Any given course may only be used to satisfy one of the competency areas even if it is listed under more than one.

[†]Students planning to transfer to a 4-year school should plan to complete MAT*H167 Principles of Statistics or MAT*H172 College Algebra.

[°] Scientific Knowledge must have a lab component.

Program Outcomes

Upon successful completion of all program requirements, graduates will be able to:

1. Explain the landscape, key terms, challenges and concepts related to the many layers of cybersecurity. Methodologies include quizzes, tests, written work, and presentations.
2. Explain fundamental architectures of networks (networks build on each other) and demonstrate an understanding of network security. Methodologies include quizzes, tests, written work, presentations, and case studies.
3. Demonstrate an understanding of the legal and ethical issues and concepts associated with cybersecurity responsibilities. Methodologies include exams, quizzes, and written work.
4. Effectively communicate technical information and approaches for incident analysis and response verbally, in writing, and in presentations. Methodologies include written work and presentations.
5. Determine if and when criminal charges will be initiated for different security breaches. Analyze range of security breaches and identify if/when criminal charges are appropriate. Methodologies: case studies.
6. Apply counter measures that would secure network systems against threats. Methodologies: case studies.
7. Identify and discuss career opportunities and the necessary skills that will increase the likelihood of success in the field of cybersecurity, e.g., technical skills, network certifications, interpersonal communications, critical thinking, and leadership skills. Methodologies include presentations and case studies.

DIGITAL ARTS TECHNOLOGY

The Digital Arts Degree is a comprehensive and tightly knit sequence of courses designed to provide the student with an in-depth understanding of interactive software development and digital media design. The program mission and focus synthesizes interactive design principles, human-computer interaction theory, software engineering structures and instructional design methods with visual and audio design principles to produce interactive software/media designers eligible for career paths in fine arts, advertising, audio production, broadcasting, education, electronic publishing, graphic art production, instructional design, marketing, and Web development. Digital artists have become an integral part of the communication media, creative arts, business, and education and positions in interactive software development and media design exist, and continue to grow, in virtually every profession.

The Digital Arts Degree provides students with a basic general education component that is transferable to four-year institutions. In addition, through a series of options, it leads students to three areas of interest. Listed below are the options, including related professional opportunities.

General Education Core course listings and definitions appear on pages 53-54. Additional courses may be required. The suggested sequence for full-time students is shown below.

Competency or Program Requirement	Audio/Video Option	Graphics/Animation Option	Multimedia/Web Authoring	Required Credits
FIRST SEMESTER				
Continuing Learning and Information Literacy/Ethics	DAT*H101 Introduction to Digital Arts	DAT*H101 Introduction to Digital Arts	DAT*H101 Introduction to Digital Arts	3
Critical Analysis and Logical Thinking/Written Communication	ENG*H101 Composition	ENG*H101 Composition	ENG*H101 Composition	3
Oral Communication	Choose any Oral Communication listed	Choose any Oral Communication listed	Choose any Oral Communication listed	3
Quantitative Reasoning [◊]	MAT*H135 or higher than MAT*H137	MAT*H135 or higher than MAT*H137	MAT*H135 or higher than MAT*H137	3
Program Requirement	ART*H121 Two Dimensional Design or ART*H250 Digital Photography or GRA*H150 Introduction to Graphic Design	ART*H121 Two Dimensional Design or ART*H250 Digital Photography or GRA*H150 Introduction to Graphic Design	ART*H121 Two Dimensional Design or ART*H250 Digital Photography or GRA*H150 Introduction to Graphic Design	3
SECOND SEMESTER				
Scientific Reasoning ^{◊◊}	Choose any Scientific Reasoning listed	Choose any Scientific Reasoning listed	Choose any Scientific Reasoning listed	3-4
Written Communication	Choose any Written Communication listed	Choose any Written Communication listed	Choose any Written Communication listed	3
Program Requirement	DAT *H108 Digital Imaging I	DAT*H104 Multimedia Authoring I	DAT*H104 Multimedia Authoring I	3
Program Requirement	DAT*H110 Digital Video I	DAT*H108 Digital Imaging I	DAT*H108 Digital Imaging I	3
Program Requirement	DAT*H218 Electronic Music Composition and Audio Technology I	DAT*H110 Digital Video I	DAT*H110 Digital Video I	3
THIRD SEMESTER				
Aesthetic Dimensions/Written Communication	Choose any Aesthetic Dimensions/ Written Communication listed	Choose any Aesthetic Dimensions/ Written Communication listed	Choose any Aesthetic Dimensions/ Written Communication listed	3
Scientific Knowledge ^{◊◊}	Choose any Scientific Knowledge listed	Choose any Scientific Knowledge listed	Choose any Scientific Knowledge listed	3-4
Program Requirement	DAT*H104 Multimedia Authoring I	DAT*H205 Multimedia Authoring II	DAT*H116 Interactive Media Design	3
Program Requirement	DAT*H220 Acoustics and Sound Design	DAT*H212 Graphics and Animation I	DAT*H205 Multimedia Authoring II	3
Program Requirement	DAT*H224 Digital Video II	DAT*H230 Digital Imaging II	CSC*H205 Visual Basic I	3
FOURTH SEMESTER				
Historical Knowledge	Choose any Historical Knowledge listed	Choose any Historical Knowledge listed	Choose any Historical Knowledge listed	3
Social Phenomena	Choose any Social Phenomena listed	Choose any Social Phenomena listed	Choose any Social Phenomena listed	3
Program Requirement	DAT*H205 Multimedia Authoring II	DAT*H106 Digital Design	DAT*H215 Multimedia Web Authoring	3
Program Requirement	DAT*H226 Motion Graphics and Animation	DAT*H234 Graphics and Animation II	DAT*H240 Multimedia Authoring III	3
Program Requirement	DAT*H290 Digital Arts Project	DAT*H290 Digital Arts Project	DAT*H290 Digital Arts Project (Will require waiver)	3

Associate Degree Programs

Total Credits: 61-62

Any given course may only be used to satisfy one of the competency areas even if it is listed under more than one.

[◊] MAT*H137 and courses numbered lower than MAT*H137 will not transfer to Connecticut State Universities as Quantitative Reasoning courses.

^{◊◊} At least one Scientific Knowledge and Understanding OR Scientific Reasoning course must have a lab component.

DIGITAL ARTS TECHNOLOGY**Audio/Video Option**

The Audio/Video Option will focus on the detailed study of acoustics, audio production, recording engineering, sound design, motion graphics, visual composition, and non-linear video editing and production. Students will be qualified to seek positions in the fields of audio production, video production, post-production, advertising, interactive design, and electronic publishing.

General Education Core course listings and definitions appear on pages 53-54. Additional courses may be required. The suggested sequence for full-time students is shown below.

Competency or Program Requirement	Course Number and Title	Required Credits
FIRST SEMESTER		
Continuing Learning and Information Literacy/Ethics	DAT*H101 Introduction to Digital Arts	3
Critical Analysis and Logical Thinking/ Written Communication	ENG*H101 Composition	3
Oral Communication	Choose any Oral Communication listed	3
Quantitative Reasoning [◊]	MAT*H135 or higher than MAT*H137	3
Program Requirement	ART*H121 Two Dimensional Design or ART*H250 Digital Photography or GRA*H150 Introduction to Graphic Design	3
SECOND SEMESTER		
Scientific Reasoning ^{◊◊}	Choose any Scientific Reasoning listed	3-4
Written Communication	Choose any Written Communication listed	3
Program Requirement	DAT *H108 Digital Imaging I	3
Program Requirement	DAT*H110 Digital Video I	3
Program Requirement	DAT*H218 Electronic Music Composition and Audio Technology I	3
THIRD SEMESTER		
Aesthetic Dimensions/Written Communication	Choose any Aesthetic Dimensions/ Written Communication listed	3
Scientific Knowledge ^{◊◊}	Choose any Scientific Knowledge listed	3-4
Program Requirement	DAT*H104 Multimedia Authoring I	3
Program Requirement	DAT*H220 Acoustics and Sound Design	3
Program Requirement	DAT*H224 Digital Video II	3
FOURTH SEMESTER		
Historical Knowledge	Choose any Historical Knowledge listed	3
Social Phenomena	Choose any Social Phenomena listed	3
Program Requirement	DAT*H205 Multimedia Authoring II	3
Program Requirement	DAT*H226 Motion Graphics and Animation	3
Program Requirement	DAT*H290 Digital Arts Project	3

Total Credits: 61-62

Any given course may only be used to satisfy one of the competency areas even if it is listed under more than one.

[◊] MAT*H137 and courses numbered lower than MAT*H137 will not transfer to Connecticut State Universities as Quantitative Reasoning courses.

^{◊◊} At least one Scientific Knowledge and Understanding OR Scientific Reasoning course must have a lab component.

Program Outcomes

Upon successful completion of all program requirements, graduates will be able to:

1. Analyze and evaluate the properties of sound, human hearing, psychoacoustics, electro-acoustic and digital sound reproduction systems.
2. Design and edit digital and analog audio files.
3. Synthesize and apply the processes involved in transforming a concept to a video production.
4. Design, produce, edit, and complete original video projects.
5. Utilize state-of-the-ART special effect techniques currently used in the film and video industry.
6. Complete significant projects terminating in deliverable software/media products with technical documentation.

DIGITAL ARTS TECHNOLOGY

Graphics/Animation Option

The **Graphics/Animation Option** will focus on the detailed study of two-dimensional digital graphics design, three-dimensional object modeling, and digital animation. Students will be qualified to seek positions in the fields of broadcasting, character animation, electronic publishing, graphic ART production, and Web design.

General Education Core course listings and definitions appear on pages 53-54. Additional courses may be required. The suggested sequence for full-time students is shown below.

Competency or Program Requirement	Course Number and Title	Required Credits
FIRST SEMESTER		
Continuing Learning and Information Literacy/Ethics	DAT*H101 Introduction to Digital Arts	3
Critical Analysis and Logical Thinking/ Written Communication	ENG*H101 Composition	3
Oral Communication	Choose any Oral Communication listed	3
Quantitative Reasoning [◊]	MAT*H135 or higher than MAT*H137	3
Program Requirement	ART*H121 Two Dimensional Design or ART*H250 Digital Photography or GRA*H150 Introduction to Graphic Design	3
SECOND SEMESTER		
Scientific Reasoning ^{◊◊}	Choose any Scientific Reasoning listed	3-4
Written Communication	Choose any Written Communication listed	3
Program Requirement	DAT*H104 Multimedia Authoring I	3
Program Requirement	DAT*H108 Digital Imaging I	3
Program Requirement	DAT*H110 Digital Video I	3
THIRD SEMESTER		
Aesthetic Dimensions/Written Communication	Choose any Aesthetic Dimensions/ Written Communication listed	3
Scientific Knowledge ^{◊◊}	Choose any Scientific Knowledge listed	3-4
Program Requirement	DAT*H205 Multimedia Authoring II	3
Program Requirement	DAT*H212 Graphics and Animation I	3
Program Requirement	DAT*H230 Digital Imaging II	3
FOURTH SEMESTER		
Historical Knowledge	Choose any Historical Knowledge listed	3
Social Phenomena	Choose any Social Phenomena listed	3
Program Requirement	DAT*H106 Digital Design	3
Program Requirement	DAT*H234 Graphics and Animation II	3
Program Requirement	DAT*H290 Digital Arts Project	3

Program Outcomes

Upon successful completion of all program requirements, graduates will be able to:

1. Design, edit and manipulate digital graphic and image files.
2. Utilize advanced techniques for character modeling and the design of virtual space.
3. Design, model, and animate complete 3-dimensional virtual worlds.
4. Utilize state-of-the-art 3D special effect techniques currently used in the film and video industry.
5. Utilize current digital imaging equipment and techniques to create/acquire content
6. Complete significant projects terminating in deliverable software/media products with technical documentation.

Total Credits: 61-62

Any given course may only be used to satisfy one of the competency areas even if it is listed under more than one.

[◊] MAT*H137 and courses numbered lower than MAT*H137 will not transfer to Connecticut State Universities as Quantitative Reasoning courses.

^{◊◊} At least one Scientific Knowledge and Understanding OR Scientific Reasoning course must have a lab component.

DIGITAL ARTS TECHNOLOGY**Multimedia/Web Authoring Option**

The Multimedia/Web Authoring Option will focus on the detailed study of the development of interactive multimedia systems, multimedia authoring, programming/scripting languages, and project development and management. Students will be qualified to seek positions in the fields of advertising, electronic publishing, interactive design, multimedia software authoring, and Web design and development.

General Education Core course listings and definitions appear on pages 53-54. Additional courses may be required. The suggested sequence for full-time students is shown below.

Competency or Program Requirement	Course Number and Title	Required Credits
FIRST SEMESTER		
Continuing Learning and Information Literacy/Ethics	DAT*H101 Introduction to Digital Arts	3
Critical Analysis and Logical Thinking/ Written Communication	ENG*H101 Composition	3
Oral Communication	Choose any Oral Communication listed	3
Quantitative Reasoning [◊]	MAT*H135 or higher than MAT*H137	3
Program Requirement	ART*H121 Two Dimensional Design or ART*H250 Digital Photography or GRA*H150 Introduction to Graphic Design	3
SECOND SEMESTER		
Scientific Reasoning ^{◊◊}	Choose any Scientific Reasoning listed	3-4
Written Communication	Choose any Written Communication listed	3
Program Requirement	DAT*H104 Multimedia Authoring I	3
Program Requirement	DAT*H108 Digital Imaging I	3
Program Requirement	DAT*H110 Digital Video I	3
THIRD SEMESTER		
Aesthetic Dimensions/Written Communication	Choose any Aesthetic Dimensions/ Written Communication listed	3
Scientific Knowledge ^{◊◊}	Choose any Scientific Knowledge listed	3-4
Program Requirement	DAT*H116 Interactive Media Design	3
Program Requirement	DAT*H205 Multimedia Authoring II	3
Program Requirement	CSC*H205 Visual Basic I	3
FOURTH SEMESTER		
Historical Knowledge	Choose any Historical Knowledge listed	3
Social Phenomena	Choose any Social Phenomena listed	3
Program Requirement	DAT*H215 Multimedia Web Authoring	3
Program Requirement	DAT*H240 Multimedia Authoring III	3
Program Requirement	DAT*H290 Digital Arts Project (Will require waiver)	3

Total Credits: 61-62

Any given course may only be used to satisfy one of the competency areas even if it is listed under more than one.

[◊] MAT*H137 and courses numbered lower than MAT*H137 will not transfer to Connecticut State Universities as Quantitative Reasoning courses.

^{◊◊} At least one Scientific Knowledge and Understanding OR Scientific Reasoning course must have a lab component.

Program Outcomes

Upon successful completion of all program requirements, graduates will be able to:

1. Utilize current design and delivery techniques to design advanced multimedia systems.
2. Utilize the phases of the project development life-cycle to assist in the design and completion of software development projects.
3. Storyboard, design, and implement multimedia systems.
4. Design and implement accessibility-compliant user interfaces.
5. Design World Wide Web Interactive technologies.
6. Complete significant projects terminating in deliverable software/media products with technical documentation.

DRUG AND ALCOHOL RECOVERY COUNSELOR (DARC)

The Drug and Alcohol Recovery Counselor (DARC) program is nationally accredited through the National Addiction Studies Accreditation Commission (NASAC) and provides education and training for persons who want to become a certified addiction counselor (CAC). The DARC curriculum (30 credits) meets the Connecticut Certification Board (CCB) requirements (300 hours of education, 300 hours of the supervised practicum) to become a CAC. The DARC program is currently the only nationally accredited “Addiction Studies” program among all two and four year colleges in Connecticut.

Employment

Students with a DARC Certificate are highly sought after for entry level opportunities as substance abuse counselors in public and private agencies such as community and residential health facilities, local hospitals, prevention organizations, youth service agencies, and criminal justice system. According to the Occupational Outlook Handbook (2016-17 Ed.), employment of addiction counselors is expected to grow by 22 percent from 2014-2024, much faster than average as addiction counseling services are increasingly covered by insurance. Connecticut is considered one of the states with the highest concentration of jobs in this field with a mean average wage of \$46, 920.

Curriculum

The DARC program consists of two years of academic study which includes general education, DARC specialty courses and a one year internship. All DARC courses (DAR*H101, H111, H112, H158, H213, H220) are open to any student at the college, provided they meet the prerequisite of ENG*H063 or ENG*H096. Students should take DAR H101 and DAR H111 in fall, DAR H112 and DAR H158 in spring. (This would be switched if a student is attending evening classes.) Students have to complete this sequence to apply for the DARC Internship which runs fall/spring of the next academic year. Students can be enrolled in the spring DAR courses and complete application/interview process.

DARC Internship Admission Process

Acceptance into the DARC Internship (DAR H251, DAR H252) is selective and not guaranteed. All students participate in a screening and interview process (spring semester) which is intended to evaluate whether the applicant possesses specific skills, behaviors and attitudes that are necessary to work with persons with addiction and co-occurring disorders. Interested applicants must have completed or be enrolled in DAR H101, H111, H112, H158 and ENG H101, and pass with a C or better. Students must complete and submit a formal DARC Application prior to the interview. Applications are distributed during the spring semester (Feb/March) each year. After the interviews, students are formally notified regarding acceptance to internship and ability to register for DAR H251 Counseling Internship 1 for the fall semester.

General Education Core course listings and definitions appear on pages 53-54. Additional courses may be required. The suggested sequence for full-time students is shown on the following page. Note: The DARC program is highly sequenced. Students are encouraged to take courses in the order they are listed on the following page.

DRUG AND ALCOHOL RECOVERY COUNSELOR (DARC)

Competency or Program Requirement	Course Number and Title	Required Credits
FIRST SEMESTER		
Critical Analysis and Logical Thinking/ Written Communication	ENG*H101 Composition	3
Oral Communication	COM*H100 Introduction to Communication	3
Program Requirement	PSY*H111 General Psychology I	3
Program Requirement	DAR*H101 Public Health Issues in Abuse and Addiction	3
Program Requirement	DAR*H111 Addiction Counseling I	3
SECOND SEMESTER		
Scientific Reasoning ^{oo}	DAR*H158 Biology of Addiction	3
Social Phenomenon	SOC*H101 Principles of Sociology	3
Written Communication	ENG*H102 Literature and Composition	3
Program Requirement	PSY*H245 Abnormal Psychology	3
Program Requirement	DAR*H112 Group Counseling Theory & Techniques	3
THIRD SEMESTER		
Continuing Learning and Information Literacy/Ethics	CSA*H105 Introduction to Computer Applications	3
Quantitative Reasoning ^o	MAT*H135 Topics in Contemporary Mathematics [†] or MAT*H167 Principles of Statistics [†]	3
Scientific Knowledge ^{oo}	BIO*H110 Principles of the Human Body or H115 Human Biology	3-4
Program Requirement	DAR*H251 Counseling Internship ^{††} (fall only)	6
Program Requirement	DAR*H220 Co-Occurring Disorders Counseling	3
FOURTH SEMESTER		
Aesthetic Dimensions/Written Comm.	Choose any Aesthetic Dimensions listed	3
Historical Knowledge	Choose any Historical Knowledge listed	3
Program Requirement	DAR H252 Counseling Internship II ^{††} (spring only)	6
Program Requirement	DAR H213 Addiction Counseling II	3

Total Credits: 63-64

Any given course may only be used to satisfy one of the competency areas even if it is listed under more than one.

[†]Mathematics selection from MAT*H135 for career degree students, or MAT*H167 for students intending to transfer. ^{††}DAR*H251 and DAR*H252 must be completed in consecutive semesters.

^o MAT*H137 and courses numbered lower than MAT*H137 will not transfer to Connecticut State Universities as Quantitative Reasoning courses. ^{oo} At least one Scientific Knowledge and Understanding OR Scientific Reasoning course must have a lab component.

Program Outcomes

Upon successful completion of the DARC Program the graduate should be able to:

1. Describe the physical, emotional and psychological basis of addiction
2. Define the causes and characteristics of substance dependence and addiction relevant to various populations and cultures
3. Define and apply counseling theories to addiction counseling including Adlerian, Existential, Person-Centered, Harm Reduction, Motivational Interviewing, Gestalt, Reality, Behavior, Cognitive Behavioral, Solution Focused, and Feminist perspectives
4. Define, demonstrate and apply ethical principles and practices according to NAADAC, the CCB, and professional behavior for working directly in the counseling field
5. Demonstrate knowledge and skills related to relapse prevention education and strategies
6. Describe the categories of drugs and effects on psychological functioning
7. Describe characteristics of individuals with co-occurring disorders and specific treatment strategies for working with this population
8. Demonstrate the ability to develop, write and implement treatment plans for individuals with addiction and co-occurring disorders
9. Co-facilitate group counseling sessions under supervision
10. Describe the use of case management in the treatment of persons with addiction and co-occurring disorders
11. Demonstrate ability to develop discharge plans for persons with addiction and co-occurring disorders
12. Demonstrate understanding of the screening, intake and evaluation process in addiction and co-occurring disorders treatment
13. Demonstrate ability to keep accurate records of group/individual process, treatment and discharge planning
14. Describe and demonstrate skills involved in crisis intervention
15. Describe the purpose and availability of self-help groups for persons with addiction/co-occurring disorders
16. Describe the effects of substance abuse on the family, educational needs and stages of recovery for families
17. Describe the stages of change model and its application to treatment of addiction and co-occurring disorders
18. Describe the use of multicultural counseling skills to assessment, treatment and aftercare issues of persons of different gender, ethnicity, disability, adolescents, the elderly, GBLT and homeless
19. Describe the transdisciplinary foundations and competencies required of addiction counselor (TAP 21)
20. Describe the use of medication in the treatment of addiction and co-occurring disorders
21. Demonstrate engagement in community service activities to educate others about the process, dangers and treatment of addiction
22. Discuss the purpose of clinical supervision and participate in the supervision process
23. Write a comprehensive case study based on a biopsychosocial assessment, including diagnosis, treatment plan goals and interventions acceptable for submission to the Connecticut Certification Board (CCB).

EARLY CHILDHOOD EDUCATION

This two-year program in Early Childhood Education will lead to the associate in science degree. The curriculum prepares students for transfer to baccalaureate programs as well as for immediate employment in early childhood programs such as child care centers, Head Start, preschools, and other similar programs. To be admitted formally to the program, the student must receive a grade of “C –” or better in each of the Early Childhood Education courses.

Practical experience is received by observing and assisting in a variety of Early Childhood settings. Students are required to student teach at the College’s Child Development Center Laboratory School. Such experience provides opportunities to implement knowledge received in the college classroom. Students in the Early Childhood program are required to consult with their academic advisor before registering for courses and scheduling the required practicum hours to be fulfilled. Student teaching hours must be done in licensed, accredited Pre-Kindergarten programs in order for those hours to apply toward a State of Connecticut Head Teacher certificate. Students graduating with an A.S. degree in Early Childhood Education will be eligible to apply for the Early Childhood Teacher Credential offered by the State Department of Education.

General Education Core course listings and definitions appear on pages 53-54. Additional courses may be required. The suggested sequence for full-time students is shown below.

Competency or Program Requirement	Course Number and Title	Required Credits
FIRST SEMESTER		
Continuing Learning/Information Literacy and Ethical Dimensions	ECE*H109 Science & Math for Children	3
Critical Analysis and Logical Thinking/ Written Communication	ENG*H101 Composition	3
Scientific Knowledge ^{oo}	BIO*H105 Introduction to Biology or BIO*H115 Human Biology	4
Social Phenomena	PSY*H111 General Psychology I	3
Program Requirement	ECE*H101 Introduction to Early Childhood Education	3
SECOND SEMESTER		
Aesthetic Dimensions and Written Communication	ECE*H103 Creative Experiences for Children	3
Written Communication	Any written communication course, ENG*H102 Literature and Composition or ENG*H200 Advanced Composition recommended	3
Program Requirement	ECE*H231 Early Language & Literacy Development	3
Program Requirement	ECE*H106 Music & Movement Education	3
Program Requirement	ECE*H141 Infant/Toddler Growth & Development	3
Program Requirement	PSY*H203 Child Development	3
THIRD SEMESTER		
Quantitative Reasoning ^o	MAT*H135 Topics in Contemporary Mathematics or higher (except 136 or 137)	3
Program Requirement	SOC*H101 Principles of Sociology	3
Program Requirement	ECE*H176 Health, Safety & Nutrition	3
Program Requirement	ECE*H210 Observation & Participation	3
Program Requirement	ECE*H290 Student Teaching I (Fall only)	3
FOURTH SEMESTER		
Oral Communication	Choose any Oral Communication listed	3
Program Requirement	Any Liberal Arts and Behavioral/ Social Sciences course: ART*H101, ART*H102, ART*H141, ART*H161, DAN*H101, ENG*H215, MUS*H101, MUS*H103, MUS*H115, MUS*H137, MUS*H218, THR*H101 recommended	3
Program Requirement	ECE*H215 The Exceptional Learner	3
Program Requirement	ECE*H222 Methods & Techniques in ECE	3
Program Requirement	ECE 291 Student Teaching II (Spring only)	3

Total Credits: 64

Any given course may only be used to satisfy one of the competency areas even if it is listed under more than one.

Program Outcomes

Upon successful completion of all program requirements, graduates will be able to:

1. Be knowledgeable about various theories as they apply to young children.
2. Demonstrate a basic knowledge of Early Childhood Education and the skills required to make objective observations of young children in the classroom setting.
3. Use effective classroom management techniques.
4. Introduce children to a wide variety of music, visual and performing arts.
5. Understand the various aspects of speech and language development and be able to plan and facilitate a high quality literacy environment.
6. Become acquainted with various communication impairments or delays and set realistic goals for young children in the area of language development.
7. Recognize that the process of creating is as important as the end product.
8. Demonstrate an understanding of the concept of creativity through planning environments and activities.
9. Understand the interconnectedness of the developmental areas and the specific needs of infants and toddlers.
10. Learn how learning theories can be applied to understanding children’s behavior.
11. Develop communication skills in relation to families, colleagues and children.
12. Provide general curricula adaptations and guidelines to help children meet their special needs.
13. Gain the experience to create a supportive and interesting learning environment.
14. Develop a curriculum using a multisensory approach to teaching.
15. Become more aware of children’s special needs.
16. Be aware of the interrelationships between child development and the areas of health, safety and nutrition.
17. Be knowledgeable about the control and prevention of communicable disease.
18. Develop an understanding of the importance of family-school relationships.
19. Become familiar with CT State Licensing Regulations; N.A.E.Y.C. Accreditation Procedures and CT State Pre-school Performance Standards.
20. Plan, organize, execute and evaluate classroom experiences on a weekly basis.

^o MAT*H137 and courses numbered lower than MAT*H137 will not transfer to Connecticut State Universities as Quantitative Reasoning courses.

^{oo} At least one Scientific Knowledge and Understanding OR Scientific Reasoning course must have a lab component.

ELECTRONIC ENGINEERING TECHNOLOGY

This program is accredited by the Engineering Technology Accreditation Commission of ABET, <http://www.abet.org>.

Today's electronics engineering technician must always be ready to serve our dynamic society. The expanding domain of electronics technology has reached into and overlapped many other disciplines. Electronic technicians of today are different from those of only a few years ago. The Electronic Engineering Technology Program at Naugatuck Valley Community College offers a curriculum that is designed to prepare students for these new career opportunities.

The program emphasizes the fundamentals of electric and electronic circuit theory and analysis, but also stresses the role of computers, computer software, CAD systems, microprocessors, robotics, digital systems, programmable logic controllers (PLC's), various laboratory instruments, data acquisition and control systems. Students gain practical "hands-on" experience by using electronic instruments, microprocessors and computers. Also, a thorough knowledge of digital/electronic circuits is acquired, along with experience in electronic fabrication techniques and the design of printed circuit boards. As a result of the training and preparation provided by our program, the Electronic Engineering Technology graduate is an important and much sought after contributor to the engineering team in Connecticut's ever-changing high technology industries. Typical job entry titles include: Engineering Technician, Research Technician, Customer Engineer, Field Service Technician, Test/Service Manager, Repair Technician, Assistant Engineer and Electronics Technician.

General Education Core course listings and definitions appear on pages 53-54. Additional courses may be required. The suggested sequence for full-time students is shown below. Note: To complete the degree in two years, students are advised to complete the courses in the sequence listed beginning in the fall semester.

Competency or Program Requirement	Course Number and Title	Required Credits
FIRST SEMESTER		
Continuing Learning/Information Literacy	EET*H104 Electrical CAD and Fabrication	1
Critical Analysis and Logical Thinking/ Written Communication	ENG*H101 Composition	3
Ethical Dimensions	EET*H110 Electric Circuits I	4
Quantitative Reasoning	MAT*H172 College Algebra	3
Scientific Reasoning	PHY*H121 General Physics I	4
Program Requirement	EET*H126 Labview	2
SECOND SEMESTER		
Oral Communication	Choose any Oral Communication listed	3
Scientific Knowledge	PHY*H122 General Physics II	4
Program Requirement	MAT*H185 Trigonometric Functions	3
Program Requirement	EET*H114 Electric Circuits II	4
Program Requirement	EET*H136 Electronics I	4
THIRD SEMESTER		
Written Communication	ENG*H102 Literature and Composition or ENG*H200 Advanced Composition or ENG*H202 Technical Writing	3
Program Requirement	EET*H232 Electronics II	4
Program Requirement	MAT*H254 Calculus I or EET*H208 Applied Circuit Analysis	3-4
Program Requirement	EET*H251 Electronic Instrumentation	3
Program Requirement	EET*H252 Digital Electronics	4
FOURTH SEMESTER		
Continuing Learning /Information Literacy	EET*H294 Projects	2
Social Phenomena	Choose any Social Phenomena listed	3
Program Requirement	Directed Technical Elective [†] (Choose from list below)	3
Program Requirement	Directed Technical Elective [†] (Choose from list below)	3
Program Requirement	EET*H256 Microprocessors	4

Total Credits: 67-68

Any given course may only be used to satisfy one of the competency areas even if it is listed under more than one.

[†] Directed Electives: EET268 Control Systems, EET253 Advanced Digital Electronics, EET208 (if MAT254 also taken), or EET242 Fiber Optics

Program Educational Objectives (PEOs)

Upon successful completion of all program requirements, graduates will be able to:

1. Apply mathematical principles and scientific laws and theorems to electrical circuit applications.
2. Use equipment to test and measure circuit characteristics.
3. Be proficient in the use of state-of-the-art software as applicable tools in the development process of new circuit or system designs.
4. Effectively communicate findings of research or laboratory experiments using written, oral and computer skills.
5. Work as a member of a team to accomplish assigned tasks on time in a laboratory setting.
6. Be expected to act consistent with accepted standards of ethical and professional conduct of an electronic engineering technician.
7. Possess the educational background and technical skills needed to: a. obtain employment as an electronic technician, and b. continue studies toward a B.S. degree in electrical engineering as well as other engineering programs.

Student Outcomes (SOs)

Upon successful completion of the program requirements, the graduates will be able to:

1. Use mathematical formulas based on scientific laws and theorems as they relate to electricity, to analyze circuit problems, formulate solutions, and predict circuit behavior of both analog and digital circuits.
2. Possess the knowledge and skills to create a digital logic circuit design as a solution to a given problem statement. Build, troubleshoot, and verify designed circuit operation. Provide full documentation on design.
3. Build analog or digital circuits from a schematic drawing. Verify operation using test equipment such as ohmmeters, digital and analog voltmeters, ammeters, oscilloscopes, power supplies, function generators, and logic probes.
4. Use PSPICE modeling circuit simulation software as a design tool to draw, simulate and test behavior of both analog and digital circuits.
5. Create an electronic project using an Electronic Design Automation software to design printed circuit board(s), build the project, and ensure its proper operation.
6. Use a high level programming language to program a microcontroller or solve a technical problem.
7. Design a LabVIEW program to serve as a system including virtual instruments to display/store /evaluate or plot data. Create a LabVIEW program as a solution to a problem, recognize the need for continuous improvement, and demonstrate the ability to apply to design.
8. Communicate lab experiment findings in the form of laboratory reports in a professional manner using appropriate word processor, spreadsheet, and schematic drawing software.
9. Present experiment results or research orally to a group.
10. Demonstrate a respect for diversity and actively participate on multicultural teams in a laboratory setting to achieve final solutions to a given task within the time allotted.
11. Realize the responsibility of the individual technician to work in a safe and ethical manner as it relates to the electronic technician profession and demonstrate the ability recognize ethical issues and utilize the IEEE code of ethics as a guide to determine appropriate course of action in response to these issues.

ENGINEERING SCIENCE**College of Technology Pathway Program**

The Engineering Science associate degree program prepares students for transfer to baccalaureate college and university programs in mechanical engineering, civil engineering, chemical engineering, electrical engineering and biomedical engineering. The program also offers students currently employed in technical positions in high technology industries the opportunity to retrain and upgrade their technical skills.

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, Central Connecticut State University, the University of Hartford, the University of New Haven or Fairfield University. Upon successful completion of the program, students earn junior status in a baccalaureate engineering program. *Note: Individual universities have different grade requirements.* Consultation with a faculty advisor is strongly recommended

Additional courses may be required. The suggested sequence for full-time students is shown below. Note: To complete the degree in two years, students are advised to complete the courses in the sequence listed beginning in the fall semester.

Competency or Program Requirement	Course Number and Title	Required Credits
FIRST SEMESTER		
Critical Analysis and Logical Thinking/ Written Communication	ENG*H101 Composition	3
Oral Communication	COM*H173 Public Speaking	3
Quantitative Reasoning	MAT*H254 Calculus I	4
Scientific Knowledge and Understanding	CHE*H121 General Chemistry I	4
Program Requirement	EGR*H111 Introduction to Engineering [†]	3
SECOND SEMESTER		
Historical Knowledge and Understanding	HIS*H101 West. Civilization I or HIS*102 West. Civilization II or HIS*201 U.S. History I or HIS*202 U.S. History II	3
Scientific Reasoning	PHY*H221 Calculus-Based Physics I	4
Written Communication	ENG*H102 Literature and Composition	3
Program Requirement	MAT*H256 Calculus II	4
Program Requirement	PHL*H111 Ethics	3
THIRD SEMESTER		
Program Requirement	MAT*H268 Calculus III: Multivariable	4
Program Requirement	PHY*H222 Calculus-Based Physics II	4
Program Requirement	EGR*H211 Engineering Statics [†]	3
Program Requirement	Directed elective ^{††}	3-4
FOURTH SEMESTER		
Aesthetic Dimensions/Written Communication	ART*H101 Art History I or ART*H102 Art History II or MUS*H101 Music History and Appreciation or THR*H101 Introduction. to Theater	3
Continuing Learning/Information Literacy and Ethical Dimensions	ECN*H101 Principles of Macroeconomics	3
Program Requirement	MAT*H285 Differential Equations	3
Program Requirement	EGR*H212 Engineering Dynamics [†]	3
Program Requirement	EGR*H214 Engineering Thermodynamics [†] or EGR*H215 Engineering Thermodynamics [†] or CHE*H122 General Chemistry II ^{†††}	3-4

Total Credits: 63-65

[†]Not currently offered at NVCC; Tunxis, Gateway, Housatonic, Norwalk and CCSU offer the courses.

^{††}Choose from ANT*H101, BIO*H121, CHE*H122, any EGR* course, ENG*H202, GEO*H111, or POL*H103 after consultation with the STEM Division Director

^{†††}Choose course after consultation with the STEM Division Director because different Bachelor degree programs have different requirements.

Program Objectives

Upon successful completion of all program requirements, graduates will be able to:

1. Be prepared to transfer into a bachelor of science degree program.
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 the ability to think through a problem in a logical manner.
6. Organize and carry through to conclusion the solution to a problem.
7. Demonstrate good communication skills.
8. Demonstrate teamwork skills.

ENGINEERING TECHNOLOGY

The Engineering Technology Program leads to an associate in science degree. It was developed to meet the need for educational opportunities that will lead to employment in jobs using electro-mechanical skills, computer knowledge and application skills. The need for Engineering Technology graduates who have a strong math/science background and who are well grounded in the application of technology to workplace problems, has been the focus of much attention by the state's employers.

Connecticut's business and industry needs technical people who have knowledge in several areas of engineering technology. The increasing application of two or more technologies to achieve desired results in such areas as robotics and computer numerical control has focused our attention on the value of an engineering technology generalist.

The engineering technician is versed in several disciplines including electrical, automated manufacturing, mechanical, and chemical, and also has a good working knowledge of computer systems. The Engineering Technology Program prepares students to be engineering technicians who are able to respond to the changing demands of "high tech" industries, who are able to communicate with both the production worker and the engineer, and who can "wear many hats."

The Engineering Technology Program is attractive to those with specific career and educational goals that require diversity and to those who are unsure of their interests and/or abilities. Students may tailor a special program to meet specific educational and/or career goals which may include a unique career, job objectives, or a technology-oriented transfer program. While providing a quality education that prepares graduates for immediate employment, the program also enables graduates to transfer to baccalaureate programs at senior institutions. It is also attractive to those presently employed seeking skills enhancement and/or upward mobility.

General Education Core course listings and definitions appear on pages 53-54. Additional courses may be required. The suggested sequence for full-time students is shown below.

Note: To complete the degree in two years, students are advised to complete the courses in the sequence listed beginning in the fall semester.

Competency or Program Requirement	Course Number and Title	Required Credits
FIRST SEMESTER		
Continuing Learning/Information Literacy and Ethics	TCN*H101 Introduction to Engineering Technology	3
Critical Analysis and Logical Thinking/Written Communication	ENG*H101 Composition	3
Quantitative Reasoning	MAT*H172 College Algebra	3
Program Requirement	MFG*H104 Manufacturing Processes	4
Program Requirement	CAD*H150 CAD 2D	3
SECOND SEMESTER		
Scientific Knowledge	CHE*H111 Concepts of Chemistry or CHE*H121 General Chemistry I [†]	4
Scientific Reasoning	PHY*H121 General Physics I	4
Written Communication	ENG*H102 Literature and Composition or ENG*H200 Advanced Composition or ENG*H202 Technical Writing (suggested)	3
Program Requirement	MAT*H185 Trigonometric Functions	3
Program Requirement	Directed Elective (200 level)**	3-4
THIRD SEMESTER		
Oral Communication	Oral Communication course COM*H173 (suggested)	3
Program Requirement	MEC*H114 Statics	3
Program Requirement	MFG*H106 Computer-Aided Manufacturing I	3
Program Requirement	EET*H102 Electrical Applications	3
Program Requirement	Directed Elective (200 level)**	3
FOURTH SEMESTER		
Social Phenomena	Choose any Social Phenomena course	3
Program Requirement	MFG*H275 Mechanics of Materials or MEC*H251 Materials Strength	3-4
Program Requirement	Directed Elective (200 level)**	3
Program Requirement	Directed Elective (200 level)**	3
Program Requirement	Directed Elective (200 level)**	3

Total Credits: 63-65

Any given course may only be used to satisfy one of the competency areas even if it is listed under more than one.

[†]Choose if planning to transfer to a Bachelor's degree program

^{**}Choose any 200-level CAD*, EET*, MAT*, MEC*, MFG*, PHY* course

Program Outcomes

Upon successful completion of all program requirements, graduates will be able to:

1. Apply appropriate mathematical and scientific principles to engineering technologies.
2. Use state-of-the-art software and hardware.
3. Design and prepare CAD drawings.
4. Perform individually or as a member of a team to complete projects in an industrial environment.
5. Conduct experiments, analyze data, and interpret results from controlled laboratory experimentation in industrial applications.
6. Effectively and efficiently plan, organize, implement, and control projects.
7. Act consistently with the ethical standards and conduct of a professional in engineering technology.
8. Communicate effectively with individuals and groups using written, oral, and computer skills.
9. Possess the educational background needed to:
 - a. obtain employment as a technician, and
 - b. continue studies toward a B.S. degree in Engineering Technology.

Also see:

Electronic Engineering Technology
 Engineering Technology
 Mechanical Engineering Technology
 Manufacturing (Automated) Engineering Technology

ENVIRONMENTAL SCIENCE

The environmental field is a broad based area of study. It is truly interdisciplinary in nature. The subjects of biology, chemistry and geology are interwoven to provide a full picture of our environment and man's impact upon this system.

The Environmental Science degree provides students with a foundation in the basic sciences and highlights the field's interdisciplinary nature. The goal of the Environmental Science Program is to prepare students to transfer into a biological environmental science program at a four-year institution.

General Education Core course listings and definitions appear on pages 53-54. Additional courses may be required. The suggested sequence for full-time students is shown below.

Competency or Program Requirement	Course Number and Title	Required Credits
FIRST SEMESTER		
Continuing Learning and Information Literacy/Ethics	Choose any Continuing Learning/ Information Literacy listed (CSA*H105 or CSC*H101 suggested)	3
Critical Analysis and Logical Thinking/ Written Communication	ENG*H101 Composition	3
Quantitative Reasoning	MAT*H172 College Algebra or higher	3-4
Scientific Reasoning	BIO*H121 General Biology I or BIO*H155 General Botany	4
Program Requirement	GLG*H121 Physical Geology	4
SECOND SEMESTER		
Written Communication	ENG*H102 Literature & Composition or ENG*H200 Advanced Composition or ENG*H202 Technical Writing	3
Program Requirement	BIO*H122 General Biology II or BIO*H145 General Zoology	4
Program Requirement	MAT*H167 Principles of Statistics	3
Program Requirement	ENV*H110 Environmental Regulations	3
Program Requirement	BIO*H181 Environmental Science	4
THIRD SEMESTER		
Historical Knowledge and Understanding	Choose any Historical Knowledge and Understanding listed	3
Oral Communication	Choose any Oral Communication listed	3
Scientific Knowledge	CHE*H121 General Chemistry I	4
Program Requirement	BIO*H171 Field Biology	4
FOURTH SEMESTER		
Aesthetic Dimensions/Written Communication	Choose any Aesthetic Dimensions listed (except HRT*H202)	3
Social Phenomena	Choose any Social Phenomena listed	3
Program Requirement	CHE*H122 General Chemistry II	4
Program Requirement	BIO*H235 Microbiology	4
Program Requirement	ENV*H120 Introduction to Hazardous Materials	3

Total Credits: 65-66

Any given course may only be used to satisfy one of the competency areas even if it is listed under more than one.

Program Outcomes

Upon successful completion of all program requirements, graduates will be able to:

1. Appreciate the liberal arts, sciences, and fine arts.
2. Critically analyze extra-perceptual media within the context of the scientific method and statistics, and recognize the distinction between scientific fact and media sensationalism.
3. Understand the interrelatedness of all species in the natural world with that of the physical world.
4. Investigate environmental problems utilizing research skills and science process skills.
5. Comprehend how ecosystems function both on a macro and micro biological level.
6. Perform basic chemical calculations and preparation of inorganic solutions.
7. Understand the basic physiology of plants, animals and microorganisms.
8. Construct, analyze, and interpret scientific data in the form of a graph.
9. Read and understand basic environmental regulations as related to safe handling of hazardous materials.
10. Scientifically analyze and critically evaluate local/regional/global environmental problems in terms of ecological principles and development of sustainable solutions.
11. Collaboratively work with peers to independently explore environmental problems and issues, as well as establish personal positions on such issues and problems.
12. Transfer to a four-year environmental science program.

FIRE TECHNOLOGY AND ADMINISTRATION

The program in Fire Technology and Administration is designed to provide advanced training and education that develops competent leaders in fire protection, prevention, and administration. It also provides training and education for personnel of insurance companies and of industries involved in fire prevention and protection practices.

Working in career and volunteer fire departments, local, state and federal government agencies, industry, architectural and construction firms, insurance organizations, and related groups, the fire technologist knows the need for fire prevention activities, the necessity to educate both children and adults in fire safety, and the importance of enforcing fire prevention codes. Because of the broad spectrum of problems encountered and the need for extensive familiarity with many subjects, the work of the fire technologist is seldom routine or boring. There is always something new to learn. However, the greatest satisfaction may come from knowing that the effective fire technologist continually improves the world in which we live by making it a safer place.

The program of study which leads to the associate in science degree in Fire Technology and Administration is planned to help students meet the professional standards established by the National Fire Protection Association, the Connecticut Commission on Fire Prevention and Control, and the Connecticut Fire Marshal's Training Council.

General Education Core course listings and definitions appear on pages 53-54. Placement testing will determine the sequencing of courses. Additional courses may be required.

Competency or Program Requirement	Course Number and Title	Required Credits
Aesthetic Dimensions/Written Communications	Waived	0
Continuing Learning and Information Literacy/Ethics	ECN*101 Principles of Macroeconomics or CSA*H105 Introduction to Software Applications or CSC*H101 Introduction to Computers	3
Critical Analysis and Logical Thinking/Written Communication	ENG*101 Composition	3
Historical Knowledge	Choose any Historical Knowledge listed	3
Oral Communication	Choose any Oral Communications listed	3
Quantitative Reasoning	MAT*H167 Principles of Statistics or MAT*H172 College Algebra or higher	3
Scientific Knowledge ^o	CHE*H111 Concepts of Chemistry	4
Scientific Reasoning ^o	BIO*H105 or BIO*H110 or BIO*H115 or PHY*H110 or PHY*H121	3 - 4
Social Phenomena	Choose any Social Phenomena listed	3
Written Communication	Choose any Written Communication listed	3
Program Requirements	FTA*H112 Introduction to Fire Technology	3
	FTA*H116 Building Construction	3
	FTA*H118 Fire Prevention and Inspection	3
	Choose 2 of the 4 courses: FTA*H122 Fire Behavior and Combustion FTA*H126 Safety and Survival FTA*H210 Water Supply and Hydraulics FTA*H213 Codes and Standards	6
	FTA*H216 Municipal Fire Administration	3
	FTA*H218 Sprinklers and Fixed Extinguishing Systems	3
	FTA*H219 Fire Investigation	3
	EMT*H100 Emergency Medical Technician (or FTA electives)	6
	General Electives (FYI - MAT 137 and/or IDS 101 are General Electives)	2

Total Credits: 60-61

Any given course may only be used to satisfy one of the competency areas even if it is listed under more than one.

^o At least one Scientific Knowledge and Understanding OR Scientific Reasoning course must have a lab component.

Fire Technology Program Director is available over the summer for advising sessions and assistance. Call (203) 575-8797 for appointment.

Program Objectives

Upon successful completion of all program requirements, graduates will be able to:

1. Demonstrate the ability to communicate verbally and in writing, prepare reports, presentations, investigations that support the administration and management of fire /emergency service agency in emergency or non-emergency situations.
2. Apply social and behavioral sciences, mathematical and scientific principles, and technical knowledge to develop and create solutions to address community problems and issues in the emergency management field they have not encountered previously.
3. Demonstrate knowledge of the organizational structure, both operational and administrative, of various types of emergency service providers, both public and private, career and volunteer, which impact the life safety of a community.
4. Understand human resource policies and procedures in order to assist members of an emergency service agency who are in need of assistance and intervention.
5. Apply basics of supervision and human resource management to set priorities so as to respond to community needs as determined in a community hazard assessment.
6. Develop a pre-incident plan of a specific facility, applying pre-planning policies, procedures and forms, so that all required elements are identified and catalogued.
7. Develop an initial action plan for an emergency operation to make maximum use of resources to control and mitigate the incident.
8. Demonstrate knowledge of safety policies, regulations and procedures as they apply to emergency and non-emergency operations of a community's emergency response agencies.
9. Demonstrate the basic knowledge necessary to conduct an inspection to identify hazards and address code violations in an Assembly, Educational, Health Care, Detention and Correctional, Residential, Mercantile, Business, Industrial, Storage, Unusual Structures, and Mixed Occupancy, so that all hazards, including hazardous materials are identified, appropriate forms are completed and appropriate action is initiated.
10. Demonstrate an in depth knowledge of who issues various protocols, standards and guides on a local, state, and national level that provide guidance to and regulation of life safety organizations.
11. Describe the methods of heat transfer and chemical processes that govern the development and spread of fire and how to apply that to various types of structures and situations in order to control and extinguish the fire by altering and improving the structure.

GENERAL STUDIES

The General Studies Program encourages students to explore, examine, and analyze a wide range of human knowledge. The program sets the foundation for lifelong learning.

The following are the requirements of the General Studies Program. The student must:

- A. COMPLETE coursework totaling not less than sixty (60) credit hours.
- B. COMPLETE the following thirty to thirty-two (30-32) credits from the College's General Education Core listing. The student is urged to take these courses before those in section "C" because they are a foundation upon which to build the program.

General Education Core course listings and definitions appear on pages 53-54. Placement testing will determine the sequencing of courses. Additional courses may be required.

Competency or Program Requirement	Course Number and Title	Required Credits
Aesthetic Dimensions/Written Communications	Choose any Aesthetic Dimensions/Written Communications listed	3
Continuing Learning and Information Literacy/Ethics	Choose any Continuing Learning and Information Literacy/Ethics listed	3
Critical Analysis and Logical Thinking/Written Communication	ENG 101 Composition	3
Historical Knowledge	Choose any Historical Knowledge listed	3
Oral Communication	Choose any Oral Communication listed	3
Quantitative Reasoning [◊]	Choose any Quantitative Reasoning listed	3
Scientific Knowledge ^{◊◊}	Choose any Scientific Knowledge listed	3-4
Scientific Reasoning ^{◊◊}	Choose any Scientific Reasoning listed	3-4
Social Phenomena	Choose any Social Phenomena listed	3
Written Communication	Choose any Written Communication listed other than ENG 101	3
	General Elective—Choose any credit bearing courses from at least three of the following academic areas: Liberal Arts and Behavioral/Social Sciences, Business, Allied Health, Nursing & Physical Education, Engineering Technologies, and Mathematics/Science. See current language below.	30

C. CHOOSE 30 additional credit hours from at least three (3) of the following academic areas: Liberal Arts and Behavioral/Social Sciences, Business, Allied Health, Nursing & Physical Education, Engineering Technologies, and Mathematics/Science. The courses chosen must be available within the present capabilities and resources of the faculty and the College. Courses restricted to students in particular programs or credit courses which do not apply to a degree may not be chosen. A degree program may not total more than sixty-eight (68) credits.

Students in other programs of the College may transfer into the General Studies Program, but they must be able to apply previous coursework or new courses in at least three (3) areas.

D. DESIGN a coherent program from the courses chosen in close consultation with a counselor.

E. SEEK formal written approval of the total General Studies Program by a counselor prior to the completion of thirty (30) total credit hours.

Total Credits: 61-62

Any given course may only be used to satisfy one of the competency areas even if it is listed under more than one.

[◊] MAT*H137 and courses numbered lower than MAT*H137 will not transfer to Connecticut State Universities as Quantitative Reasoning courses.

^{◊◊} At least one Scientific Knowledge and Understanding OR Scientific Reasoning course must have a lab component.

General Education Outcomes: See page 54 for General Education Competencies and Goals

HORTICULTURE

The Horticulture Program is designed as a career program leading to the associate in science degree. The goal of the Horticulture Program is to prepare students for employment in landscaping, garden centers, greenhouses, or related businesses and for further education. The program includes the completion of two full years of study and an appropriate supervised cooperative work experience with nurseries, landscape businesses and greenhouses.

The transfer program articulated with UConn guarantees admission with complete transfer of NVCC courses. Visit <http://admissions.uconn.edu/content/transfer/gap-cnar>. This is a National Association of Landscape Professionals (NALP) accredited program. NVCC is a member of the CT Nursery and Landscape Association, CT Greenhouse Growers Association and CT Florist Association.

General Education Core course listings and definitions appear on pages 53-54. Additional courses may be required. The suggested sequence for full-time students is shown below.

Note: To complete the degree in two years, students are advised to complete the courses in the sequence listed beginning in the fall semester.

Competency or Program Requirement	Course Number and Title	Required Credits
FIRST SEMESTER		
Critical Analysis and Logical Thinking/ Written Communication	ENG*H101 Composition	3
Quantitative Reasoning [◊]	MAT*H121 Applications for Business and Other Careers, MAT*H135 Topics in Contemporary Math, or higher than MAT*H137 Intermediate Algebra	3
Scientific Knowledge and Understanding	HRT*H102 Woody Plants	3
Program Requirement	HRT*H101 Landscape Construction	4
Program Requirement	ENV*H240 Principles of Soil and Water Resources [†]	3
SECOND SEMESTER		
Aesthetic Dimensions	HRT*H202 Landscape Design I	3
Scientific Reasoning	HRT*H222 Greenhouse Management & Operations	4
Program Requirement	HRT*H103 Herbaceous Plants	3
Program Requirement	BIO*H155 General Botany	4
SUMMER SEMESTER		
Program Requirement	HRT*H290 CWE/Co-Op ^{††}	3
THIRD SEMESTER		
Oral Communication	Choose any Oral Communication listed	3
Program Requirement	HRT*H215 Pest Control in Ornamentals and Turf	3
Program Requirement	Directed elective ^{†††}	3
Program Requirement	HRT*H207 Landscape Maintenance	3
Written Communication	ENG*H102 Literature and Composition	3
FOURTH SEMESTER		
Continuing Learning/Information Literacy and Ethical Dimensions	ECN*H101 Principles of Macroeconomics	3
Historical Knowledge and Understanding	HIS*H201 U.S. History I	3
Program Requirement	BMG*H202 Principles of Management	3
Program Requirement	Directed elective ^{†††}	3-4
Program Requirement	Directed elective ^{†††}	3-4

Total Credits: 63-65

Any given course may only be used to satisfy one of the competency areas even if it is listed under more than one.

[†]ENV*H240 Principles of Soil and Water Resources is only offered in the Fall semester

^{††}HRT*H290 Placement is required for this course. Students need to contact the program coordinator early in the semester prior to taking the course.

^{†††} Directed electives: HRT*H105, HRT*H115, HRT*H124^{††††}, HRT*H125^{††††}, HRT*H203, HRT*H204, HRT*H206, HRT*H219, HRT*H224, HRT*H240

^{††††}HRT*124 Floral Design I and HRT*125 Floral Design II have not been offered recently.

[◊] MAT*H137 and courses numbered lower than MAT*H137 will not transfer to Connecticut State Universities as Quantitative Reasoning courses.

Program Outcomes

Upon successful completion of all program requirements, graduates will be able to:

1. Relate basic knowledge of botany, chemistry, and soils to plant growth and culture.
2. Identify the skills needed to organize thoughts and ideas, and demonstrate the ability to communicate, verbally and in writing, in a manner that can be easily understood.
3. Solve mathematics problems related to the use of soil amendments, fertilizers, and plant growth control chemicals, and apply effective cost estimating, pricing, and record keeping techniques.
4. Identify common trees and shrubs, ground covers, various annuals, biennials, and perennials by botanical and common names, and describe the outstanding characteristics of each; summarize landscape, garden center, and greenhouse uses and cultural requirements of these plants.
5. Identify foliage plants commonly used indoors by botanical and common names, state distinguishing characteristics of each, and describe their use and culture in various indoor landscape areas.
6. Select the proper procedures, define the physiological basis, and describe practical applications of the reproduction of plants by asexual and sexual methods.
7. Describe proper design and operation of greenhouse environmental systems, and evaluate their advantages and disadvantages in commercial production.
8. Summarize and assess plant growth requirements for commercial production of greenhouse crops, and economically produce a crop from seed or cutting to harvest and sales.
9. Demonstrate a responsible attitude in relationships with employers, fellow employees, and toward the world of work.
10. Select appropriate techniques for the establishment and management of lawns and utility turf areas.
11. Manage the procedures used in landscape constructions and in the maintenance of small engines.
12. Design flower beds, mixed borders, price trees and shrubs for a variety of gardens, for both residential and commercial properties.
13. Create, manage and gain profit from running a small landscaping business.
14. Access available resources to incorporate technological innovations.
15. Evaluate and design landscapes that compliment the community, highlight the home, and meet the needs of the client.
16. Demonstrate skills in planning and successfully producing fruit and vegetables commercially and residentially.

HOSPITALITY MANAGEMENT

Foodservice Management

Foodservice is the second largest retail industry in the nation, employing more people in more businesses than any other retail industry. The demand for qualified personnel is much greater than the supply. Career opportunities abound in restaurants, hotels, resorts, clubs, conference centers, air and cruise lines, schools and colleges, and health care. The general objective of the Foodservice Management program is to prepare students for employment or self-employment in entry to midlevel supervisory and management careers in any of several types of foodservice operations and related positions in production, planning, sales and marketing. In addition, successful completion of the program provides graduates with the opportunity to transfer to bachelor of science degree programs in Hospitality Management/Administration in top universities. The program received the **V.I.P. Award from Connecticut's Department of Education and the Governor's Connecticut Tourism Award.**

General Education Core course listings and definitions appear on pages 53-54. Placement testing will determine the sequencing of courses. Additional courses may be required. The suggested sequence for full-time students is shown below.

Note: To complete the degree in two years, students are advised to complete the courses in the sequence listed beginning in the fall semester.

Competency or Program Requirement	Course Number and Title	Required Credits
Aesthetic Dimensions/Written Communications	Choose any Aesthetic Dimensions/Written Communications listed	3
Continuing Learning and Information Literacy/Ethics	CSA*H105 Introduction to Software Applications or CSC*H101 Introduction to Computers [†]	3
Critical Analysis and Logical Thinking/Written Communication	ENG*101 Composition	3
Historical Knowledge	BBG*H231 Business Law I	3
Oral Communication	COM*H100 Introduction to Communications, COM*H173 Public Speaking, ESL*H157 Oral Communications V	3
Quantitative Reasoning [◊]	Choose any Quantitative Reasoning listed ^{**}	3
Scientific Knowledge	BIO*H111 Introduction to Nutrition ^{†††}	3
Scientific Reasoning	Waived	0
Social Phenomena	ECN*H101 Principles of Macroeconomics	3
Written Communication	Choose any Written Communication listed	3
Program Requirements	ACC*H113 Principles of Financial Accounting	3
	HSP*H100 Introduction to Hospitality	3
	HSP*H101 Principles of Food Preparation	3
	HSP*H135 Service Management	3
	HSP*H202 Catering and Events Management	3
	HSP*H108 Sanitation and Safety	3
	HSP*H102 Food Production and Purchasing	3
	HSP*H237 Hospitality Marketing	3
	BMG*H202 Principles of Management	3
	HSP*H211 Food and Beverage Cost Control	3
	Any Business or Hospitality Elective	3

Total Credits: 60

Any given course may only be used to satisfy one of the competency areas even if it is listed under more than one.

[◊] MAT*H137 and courses numbered lower than MAT*H137 will not transfer to Connecticut State Universities as Quantitative Reasoning courses.

[†]CSC*H101 recommended for students intending to transfer.

^{**}Mat*H167 has prerequisite of MAT*H137, and is recommended for students intending to transfer.

^{†††}Transfer students may want to consider taking a four-credit science course with lab.

Note: Course substitutions may be granted with written approval of HSP Program Coordinator or Business Division Director. See course description (HSP) for Wine, Viticulture and Baking courses.

Program Outcomes

Upon successful completion of all program requirements, graduates will be able to:

1. Identify, organize, plan and allocate resources in foodservice operations such as time, materials and facilities, money, and human resources.
2. Demonstrate a working knowledge of food preparation theories and techniques, and utilize food production knowledge (quantity and quality standards) to meet production requirements of a foodservice operation within a projected budget.
3. Effectively work with others as a member of a team, serving clients and customers, and teaching others new skills. Exercise leadership behaviors, negotiate, and work with others from diverse backgrounds.
4. Obtain nationally recognized professional certification in such areas as food sanitation (as required by State Statute) and food, beverage, and labor cost controls. Demonstrate appropriate personal hygiene.
5. Organize and evaluate information from a variety of sources including food preparation and service techniques and costs, food and related purchasing specifications, catered events planning, research data, and computer applications and Internet output. Communicate the results to others using oral, written, graphic or multimedia methods.
6. Apply concepts of procurement and inventory to purchase, receive, store, issue, and distribute food and related items in a foodservice operation.
7. Identify current trends in the foodservice industry such as delivery systems and functions, and operate effectively within them. Make suggestions to modify existing systems, to improve products or services, and develop new or alternate systems.
8. Judge which set of foodservice procedures, tools or machines, including computer applications, will produce the desired results, and apply such technology to task.
9. Demonstrate behavior and self-management reflective of personal and professional ethical conduct.
10. Perform basic mathematical computations accurately and appropriately, especially with regard to food and beverage production, purchasing and cost controls.
11. Identify and apply basic concepts of human nutrition and health in the preparation and service of food.
12. Describe and apply basic marketing, sales and merchandising methods in hospitality operations.
13. Demonstrate work readiness through resume preparation, appropriate business dress and behavior, and assertive communication skills.

HOSPITALITY MANAGEMENT

Hotel Management

The nation's dynamic lodging industry generates over \$100 billion in yearly sales, employs over 2 million people and creates 100,000 new jobs each year. A wide variety of career opportunities exist in convention, resort, luxury and motor hotels as well as in new lodging concepts such as all-suite hotels, bed-and-breakfast inns and geriatric care facilities. Graduates pursue management careers in rooms division, front office, food and beverage, conference services, banquets, marketing and sales, financial control, recreation, security, housekeeping and concierge among others. The program was recently honored with the **Governor's Connecticut Tourism Award in Hospitality Education Training**.

The general objective of the Hotel Management program is to prepare students for employment or self-employment in entry to midlevel supervisory and management careers, in any of several types of lodging operations and related positions in operations, planning, tourism, sales and marketing. In addition, successful completion of the program provides graduates with the opportunity to transfer to bachelor of science degree programs in Hospitality Management/Administration in top universities.

General Education Core course listings and definitions appear on pages 53-54. Placement testing will determine the sequencing of courses. Additional courses may be required.

Competency or Program Requirement	Course Number and Title	Required Credits
Aesthetic Dimensions/Written Communications	Choose any Aesthetic Dimensions/Written Communications listed	3
Continuing Learning and Information Literacy/Ethics	CSA*H105 Introduction to Software Applications or CSC*H101 Introduction to Computers	3
Critical Analysis and Logical Thinking/Written Communication	ENG*101 Composition	3
Historical Knowledge	BBG*H231 Business Law I	3
Oral Communication	COM*H100 Introduction to Communications or COM*H173 Public Speaking or ESL*H157 Oral Communications V	3
Quantitative Reasoning ^o	Choose any Quantitative Reasoning listed	3
Scientific Knowledge ^{oo}	BIO*H111 Introduction to Nutrition or any listed lab science	3-4
Scientific Reasoning ^{oo}	Waived	0
Social Phenomena	ECN*H101 Principles of Macroeconomics	3
Written Communication	Choose any Written Communication listed	3
Program Requirements	ACC*H113 Principles of Financial Accounting	3
	HSP*H100 Introduction to Hospitality	3
	HSP*H101 Principles of Food Preparation	3
	HSP*H135 Service Management	3
	HSP*H242 Hotel Management	3
	HSP*H108 Sanitation and Safety	3
	HSP*H241 Principles of Tourism and Travel	3
	HSP*H237 Hospitality Marketing	3
	BMG*H202 Principles of Management	3
	HSP*H211 Food and Beverage Cost Control	3
Hospitality or Business Elective	3	

Total Credits: 60-61

Any given course may only be used to satisfy one of the competency areas even if it is listed under more than one.

^oMat*H167 has prerequisite of MAT*H137, and is recommended for students intending to transfer.

^{oo}CSC*H101 recommended for students intending to transfer.

^{ooo}Transfer students may want to consider taking a four-credit science course with lab.

Note: Course substitutions may be granted with written approval of HSP Program Coordinator or Business Division Director. See course description (HSP) for Wine, Viticulture and Baking courses.

^o MAT*H137 and courses numbered lower than MAT*H137 will not transfer to Connecticut State Universities as Quantitative Reasoning courses. ^{oo} At least one Scientific Knowledge and Understanding OR Scientific Reasoning course must have a lab component.

Program Outcomes

Upon successful completion of all program requirements, graduates will be able to:

1. Identify, organize, plan and allocate resources in hotel operations such as time, materials and facilities, money, and human resources.
2. Process reservations, register the guest, process guest departure, and assist in resolving guest problems.
3. Describe functional relationships among hotel divisions and departments.
4. Perform night audit procedures.
5. Summarize development and operational components of the following industries: airline, surface travel, cruise and steamship, and hotel/motel/resort.
6. Identify and implement systems and processes for room status/changes, front office posting, telephone/pbx, bank maintenance, cash transactions, and security and guest keys.
7. Demonstrate a working knowledge of food preparation theories and techniques, and utilize food production knowledge (quantity and quality standards) to meet production requirements of a foodservice operation.
8. List and describe the steps in planning destination development, and discuss the social, cultural and economic impact of this development upon the local environment.
9. Identify major geographical areas in terms of tourism generators.
10. Distinguish between various systems of travel/tourism distribution and intermediary functions.
11. Effectively work with others as a member of a team, serving clients and customers, and teaching others new skills. Exercise leadership behaviors, negotiate, and work with others from diverse backgrounds.
12. Obtain nationally recognized professional certification in such areas as front desk procedures and food, beverage, and labor cost controls, as well as foodservice sanitation, as required by State Statute.
13. Apply concepts of procurement and inventory to purchase, receive, store, issue, and distribute food, and related items in a foodservice operation.
14. Identify current trends in the lodging industry such as delivery systems and functions, and operate effectively within them. Make suggestions to modify existing systems, to improve products or services, and develop new or alternate systems.
15. Judge which set of hotel procedures, tools or machines, including computer applications, will produce the desired results, and apply such technology to task.
16. Demonstrate behavior and self-management reflective of personal and professional ethical conduct.
17. Perform basic mathematical computations accurately and appropriately, especially with regard to hotel and guest accounting, night audit, and cost controls.
18. Describe and apply basic marketing, sales and merchandising methods in hospitality operations.
19. Demonstrate work readiness through resume preparation, appropriate business dress and behavior, and assertive communication skills.

HUMAN SERVICES/PRE-SOCIAL WORK

Pre-Social Work

The field of Human Services is a dynamic and growing profession. Human Services provide assistance for people in all walks of life and in all stages of human development. Services focus on the individual as a whole and stress care in relation to the individual's circumstances and social environment.

The Program at NVCC offers an Associate Degree that allows students the opportunity, through directed electives, to focus on the areas of child and family services, disability & mental health, or gerontology. In addition, Certificate Programs are offered in these three areas of focus. The degree program curriculum prepares students for entry level, generalist Human Services practice. Examples of employment opportunities for graduates include case aide, case worker, youth worker, home visitor, shelter worker, parent advocate, residential counselor, and community educator. The program is also designed to provide ease of transfer for students continuing their education at a four-year institution in human services and social work.

ADMISSION TO THE PROGRAM AND SPECIAL INFORMATION

A student may enter the Human Services major by either declaring it upon admission to the College or transferring from another program within the College. As a professional preparation / pre-social work program, successful progress in the major necessitates that the student achieve a minimum grade of "C" in each of the three core Human Services courses before proceeding to the next one (HSE*H101, HSE*H202, HSE*H281). Among the special characteristics of the Program is the coordination of supervised field work experience with academic studies. In the field work experience, students, under professional supervision, engage in hands-on training in the area of their interest at community agencies.

General Education Core course listings and definitions appear on pages 53-54. Placement testing will determine the sequencing of courses. Additional courses may be required. Students are encouraged to meet with a Human Services academic advisor to select the appropriate elective courses based on their career and transfer goals.

Competency or Program Requirement	Course Number and Title	Required Credits
Aesthetic Dimensions/Written Communications	Choose any Aesthetic Dimensions/Written Communications listed	3
Continuing Learning and Information Literacy/Ethics	Choose any Continuing Learning and Information Literacy/Ethics listed	3
Critical Analysis and Logical Thinking/Written Communication	ENG*101 Composition	3
Historical Knowledge	POL*H111 - American Government	3
Oral Communication	Choose any Oral Communication listed	3
Quantitative Reasoning ^o	MAT*H135 Topics in Contemporary Math or MAT*H167 Principles of Statistics [†]	3
Scientific Knowledge ^{oo}	BIO*H105 – Introduction to Biology or BIO*H115 – Human Biology w/Lab	4
Scientific Reasoning ^{oo}	Choose any Scientific Reasoning listed	3-4
Social Phenomena	PSY*H111 – General Psychology	3
Written Communication	ENG*H102 Literature & Composition or ENG*H200 – Advanced Composition	3
Program Requirements	HSE*H101 - Introduction to Human Services	3
	HSE*H202 - Introduction to Counseling & Interviewing	3
	Human Services Elective ^{††}	3
	HSE*H281 - Human Services Field Work ^{†††}	3
	SOC*H101 - Principles of Sociology	3
	SOC*H210 - Sociology of the Family	3
	SOC*H201 - Contemporary Social Issues or SOC*H221 Social Inequality	3
	PSY* H258 - Behavior Modification	3
	Gen Ed Elective	3
	Any Psychology, Sociology, History or Anthropology	3

Total Credits: 61-62

Any given course may only be used to satisfy one of the competency areas even if it is listed under more than one.

[†]MAT*H167 has prerequisite of MAT*H137.

^{††}Child and Family focus, HSE*H115.

Disability and Mental Health focus, HSE*H133.

Gerontology focus, HSE*H170 or HSE*H171.

^{†††}Placement is required. Students need to contact the program coordinator or the LABSS division office early, prior to the semester they plan to take the course.

^o MAT*H137 and courses numbered lower than MAT*H137 will not transfer to Connecticut State Universities as Quantitative Reasoning courses.

^{oo} At least one Scientific Knowledge and Understanding OR Scientific Reasoning course must have a lab component.

Program Outcomes

Upon successful completion of all program requirements, graduates will be able to:

1. Describe how the events of the political, social, and economic climate have shaped the American response to human needs.
2. Compare and contrast the ecological, functional, and conflict perspectives to understand and analyze social issues such as inequality, alienation, poverty, crime and health.
3. State the major theories, processes, and research methods important in psychology.
4. Describe the relationship between politics, research and the establishment of social policy.
5. Identify the history of treatment, issues and needs of the primary populations that require human services intervention.
6. Utilize the critical thinking skills necessary to read and analyze current and future trends as presented in literature related to the field of Human Services.
7. Demonstrate an understanding of how to use the skills of engagement, assessment, case planning, intervention and termination with a diverse population.
8. Present a well-organized, comprehensive oral report before a group.
9. Demonstrate behaviors that comply with the ethical standards of the National Organization of Human Services.
10. Demonstrate an increased awareness of available community resources and the relationships among community systems.
11. Demonstrate the ability to document information, and present a well-written report that demonstrates critical thinking skills.

LEGAL ASSISTANT/PARALEGAL

The Legal Assistant/Paralegal Program is a member of the American Association for Paralegal Education whose focus is to train paralegals for private and public placement. It is not a pre-law program intended for those students who plan to enroll in law school after they have completed a baccalaureate program. Students who are planning to eventually enter law school should obtain a four-year degree as soon as possible.

The Legal Assistant/Paralegal curriculum prepares qualified people to handle, in a professional manner, many of the complex tasks involved in rendering skilled assistance to lawyers. Legal Assistants are prepared to do specialized work for banks, insurance companies, real estate firms, corporate offices, and public and semi-public agencies. The Legal Assistant/Paralegal Program offers a new career opportunity in a rapidly expanding field for people who have had no previous experience with legal work. For people already employed in legal work, the program will upgrade their skills. The topic of ethics and the paralegal's role in the legal profession are emphasized throughout the courses in the program.

General Education Core course listings and definitions appear on pages 53-54. Placement testing will determine the sequencing of courses. Additional courses may be required. Students are encouraged to meet with a Legal Assistant/Paralegal academic advisor each semester to select the appropriate courses.

Competency or Program Requirement	Course Number and Title	Required Credits
Aesthetic Dimensions/Written Communications	Choose any Aesthetic Dimensions/Written Communications listed	3
Continuing Learning and Information Literacy/Ethics	CSA*H105 Introduction to Software Applications	3
Critical Analysis and Logical Thinking/Written Communication	ENG*101 Composition	3
Historical Knowledge	BBG*H231 Business Law I	3
Oral Communication	COM*H100 Introduction to Communications	3
Quantitative Reasoning ^o	MAT*H135 or higher than MAT*H137	3
Scientific Knowledge ^{oo}	Choose any Scientific Knowledge listed	3-4
Scientific Reasoning ^{oo}	Choose any Scientific Reasoning listed	3-4
Social Phenomena	ECN*H101 Principles of Macroeconomics	3
Written Communication	ENG*102 Literature and Composition	3
Program Requirements	LGL*H101 Introduction to Paralegalism	3
	LGL*H104 Real Estate Practice	3
	LGL*H102 Legal Research & Writing	3
	LGL*H208 Litigation	3
	LGL*H209 Probate Practice	3
	Legal Electives [†]	9
	Business Elective ^{**}	3

Total Credits: 61-62

Any given course may only be used to satisfy one of the competency areas even if it is listed under more than one.

[†]Choose 3 of the following:

LGL*H210 Family Law
 LGL*H204 Criminal Procedure
 LGL*H230 Advanced Legal Issues Seminar
 LGL*H206 Bankruptcy Law
 BBG*H232 Business Law II

^{**}Choose 1 course from the following disciplines:

Management, Finance, Accounting, Computer Science, marketing, Economics

^oMAT*H137 and courses numbered lower than MAT*H137 will not transfer to Connecticut State Universities as Quantitative Reasoning courses.

^{oo}At least one Scientific Knowledge and Understanding OR Scientific Reasoning course must have a lab component.

Program Outcomes

Upon successful completion of all program requirements, graduates will be able to:

1. Interview client(s) and condense fact patterns into a concise legal analysis.
2. Explain the structure of the State and Federal Court system, including Trial Court function(s) and Appellate Court functions.
3. Identify historical, sociological and political trends that have changed, and continue to change, the American legal system.
4. Explain the role of forensic science in evidentiary matters pertaining to civil and criminal litigation.
5. Research a particular fact pattern to identify all legal issues, and describe the competing arguments that can be advanced by parties to a controversy.
6. Explain the role of the judiciary in providing a balance to the legislative and executive functions of government.
7. Differentiate between liability issues and damage issues in legal controversies.
8. Identify inherent restrictions in the civil and criminal legal process that inhibit the ability of the legal system to function as a tool of social justice.
9. Identify and present a logical plan for a client, taking into account the strengths and weaknesses of adopting various legal positions.
10. Maintain organized financial data concerning a client's case file.
11. Foster good relations between the law firm, department, or public entity, and the clients served.
12. Demonstrate organization in handling multiple client case files, and maintain strict docket control for timely case file review.
13. Understand conflict resolution as viewed from the theoretical perspective and the pragmatic perspective.
14. Apply common law principles and statutory principles where appropriate.
15. Recognize fundamental tort and contract principles that are found in different areas of the law.

LIBERAL ARTS AND SCIENCES

Liberal education is intended to sharpen intelligence and to foster growth of personal values. The suggested liberal arts and sciences sequences outlined below provide the broad foundation for those students who plan to transfer for a bachelor's degree. The program may also be used as a basis in professional studies such as education, medicine and health, dentistry, pharmacy, law, or business administration. For graduation, students must complete coursework totaling not less than sixty-one (61) credit hours.

Because students need to be aware of specific requirements of those colleges to which they hope to transfer, the Liberal Arts and Sciences Program requires that students seek the advice of a college counselor and faculty advisor, and they must obtain a current catalog from the four-year institution of their choice.

General Education Core course listings and definitions appear on pages 53-54. Placement testing will determine the sequencing of courses. Additional courses may be required.

Competency or Program Requirement	Course Number and Title	Required Credits
Aesthetic Dimensions/Written Communications	Choose any Aesthetic Dimensions/Written Communications listed	3
Continuing Learning and Information Literacy/Ethics	Choose any Continuing Learning and Information Literacy/Ethics listed	3
Critical Analysis and Logical Thinking/Written Communication	ENG*101 Composition	3
Historical Knowledge	Choose any Historical Knowledge listed	3
Oral Communication	Choose any Oral Communication listed	3
Quantitative Reasoning [◊]	Choose any Quantitative Reasoning listed	3
Scientific Knowledge ^{◊◊}	Choose any Scientific Knowledge listed	3-4
Scientific Reasoning ^{◊◊}	Choose any Scientific Reasoning listed	3-4
Social Phenomena	Choose any Social Phenomena listed	3
Written Communication	ENG*102 Literature and Composition or ENG*200 Advanced Composition	3
Program Requirements	Additional Critical Analysis and Logical Thinking course	3
	Any Philosophy course	3
	ENG 2XX Literature course (excludes 202, 281, 282)	3
	Modern Language [†]	6
	Liberal Arts Elective	3 from any course in the General Education Core (See pages 53-54.)
General Electives	12 from any credit bearing courses	

Liberal Arts graduates may successfully continue their studies at colleges and universities with majors such as:

- Anthropology
- Biology
- Chemistry
- Communications
- Economics
- Education
- English
- Fine Arts
- Geography
- History
- Languages
- Mathematics
- Philosophy
- Political Science
- Psychology
- Physics
- Sociology

With good planning, students may transfer into many other majors as well. Students will work primarily on Core Requirements of transfer colleges, and may also begin to fulfill course requirements in a major, by choosing liberal arts and general electives in their chosen discipline. As a first step, students should refer to the Liberal Arts and Sciences definitions, "General Education Core," and then to the appropriate course descriptions.

It is very important to work closely with an advisor when selecting these courses. The concentration may serve your immediate interest or needs, but the college to which you are transferring makes the final determination as to which courses it will accept.

Total Credits: 61-62

Any given course may only be used to satisfy one of the competency areas even if it is listed under more than one.

[†]Student may substitute general education elective credits for 3 years of Modern Language in high school. Some four-year colleges may require a language proficiency exam. ESL students may use up to six credits of Intermediate and Advanced levels of ESL courses to fulfill the Modern Language and/or Arts/Humanities elective requirements. However, transfer of ESL credits from NVCC to other institutions or from institutions to NVCC is governed by the policies of the receiving institution.

[◊] MAT*H137 and courses numbered lower than MAT*H137 will not transfer to Connecticut State Universities as Quantitative Reasoning courses.

^{◊◊} At least one Scientific Knowledge and Understanding OR Scientific Reasoning course must have a lab component.

MANUFACTURING (AUTOMATED) ENGINEERING TECHNOLOGY

This program is accredited by the Engineering Technology Accreditation Commission of ABET, <http://www.abet.org>.

The ultimate goal of the Automated Manufacturing Engineering Technology Program is to develop a highly skilled, hands-on, manufacturing technologist for the 21st century. Students are engaged in learning a full range of practical industrial skills that occur throughout a product's assembly or production process. Students are exposed to specific subject areas such as Lean Manufacturing, CNC programming, CAD/CAM operations, Additive Manufacturing, and Materials Production. In addition, traditional first year and second year engineering courses such as (Statics & Strength of Materials) are incorporated to provide a foundation for continuing on to four year Bachelor of Science programs in Manufacturing Engineering Technology, Mechanical Engineering Technology, and Technology Management.

General Education Core course listings and definitions appear on pages 53-54. Additional courses may be required. The suggested sequence for full-time students is shown below. Note: To complete the degree in two years, students are advised to complete the courses in the sequence listed beginning in the fall semester.

Competency or Program Requirement	Course Number and Title	Required Credits
FIRST SEMESTER		
Continuing Learning/Information Literacy and Ethics	TCN*H101 Introduction to Engineering Technology	3
Critical Analysis and Logical Thinking/Written Communication	ENG*H101 Composition	3
Quantitative Reasoning	MAT*H172 College Algebra	3
Program Requirement	MFG*H104 Manufacturing Processes	4
Program Requirement	CAD*H150 CAD 2D	3
SECOND SEMESTER		
Scientific Knowledge	CHE*H111 Concepts of Chemistry or CHE*H121 General Chemistry I [†]	4
Scientific Reasoning	PHY*H121 General Physics I	4
Written Communication	ENG*H102 Literature and Composition or ENG*H200 Advanced Composition or ENG*H202 Technical Writing (suggested)	3
Program Requirement	MAT*H185 Trigonometric Functions	3
Program Requirement	CAD*H200 3D CAD Modeling or MAT*H254 Calculus ^{††}	4
THIRD SEMESTER		
Social Phenomena	Choose any Social Phenomena course listed	3
Program Requirement	MEC*H114 Statics	3
Program Requirement	MFG*H106 Computer-Aided Manufacturing I	3
Program Requirement	MFG*H171 Intro to Lean Manufacturing	3
Program Requirement	EET*H102 Electrical Applications	3
FOURTH SEMESTER		
Oral Communication	Choose any Oral Communication course listed, COM*H173 (recommended)	3
Program Requirement	MFG*H275 Mechanics of Materials or MEC*H251 Materials Strength	3-4
Program Requirement	MFG*H239 Geometric Dimension & Tolerance or MFG*H230 Statistical Process Control	3
Program Requirement	MFG*H210 Materials of Engineering	4
Program Requirement	MFG*H201 Computer-Aided Manufacturing II	3

Total Credits: 65-66

Any given course may only be used to satisfy one of the competency areas even if it is listed under more than one.

[†]Choose CHE*H121 if planning to transfer to a Bachelor's degree program.

^{††}Choose MAT*H254 if transferring to a Bachelor's degree program.

Take MAT*H254 in semester 3 and EET*H102 in semester 2.

Program Educational Objectives (PEOs)

Upon successful completion of the program requirements, the graduates will be able to:

1. Graduates will use the knowledge of fundamental technical sciences integrated with applied technical specialties such as manufacturing processes, engineering materials, and manufacturing management and will successfully apply analytical techniques and problem solving skills necessary to adapt to technological changes and for a career in Automated Manufacturing Engineering Technology.
2. Graduates will use the academic experience from projects, laboratory experimentation, classroom lectures, and demonstrations and will apply the in-depth technical knowledge attained in areas such as applied mechanics, computer-aided engineering graphics and manufacturing, design, and CNC machining.
3. Graduates will effectively use their communication skills in oral, written, visual, and graphic modes within interpersonal, team, and group environments.
4. Graduates will demonstrate professionalism and ethics, including commitment to utmost performance quality and timeliness, respect for diversity, and awareness of international issues; and will initiate continuing professional development that demonstrates their commitment to the responsibilities of a contemporary engineering technologist throughout their careers.

Student Outcomes (SOs)

Upon successful completion of the program requirements, the graduates will demonstrate the:

1. Ability to apply basic knowledge of mathematics, science and engineering principles to solve technical problems.
2. Ability to identify, formulate, and solve technical problems.
3. Ability to use modern technical and computer based tools in engineering practice.
4. Ability to conduct experiments and to analyze and interpret data.
5. Ability to develop a system or process to meet desired needs.
6. Ability to function effectively on teams and within a diverse environment.
7. Ability to communicate effectively in oral, written, visual, and graphic modes.
8. Recognition of the need for self-improvement through continuing education and the ability to engage in lifelong learning.
9. Understanding of professionalism and ethics and associated responsibilities.
10. Knowledge of contemporary issues and understanding of the impact of engineering/technical solutions within a global perspective.

MARKETING

The Marketing Program is designed to provide the most appropriate education and skills for those who are currently working or who plan to work, after receipt of their degree. At the same time, it provides flexibility to fit into a bachelor's degree in Marketing for students who plan to immediately transfer to a four-year college.

General Education Core course listings and definitions appear on pages 53-54. Placement testing will determine the sequencing of courses. Additional courses may be required.

Competency or Program Requirement	Course Number and Title	Required Credits
Aesthetic Dimensions/Written Communications	Choose any Aesthetic Dimensions/Written Communications listed	3
Continuing Learning and Information Literacy/Ethics	CSA*H105 Introduction to Software Applications or CSC*H101 Introduction to Computers	3
Critical Analysis and Logical Thinking/Written Communication	ENG*101 Composition	3
Historical Knowledge	BBG*H231 Business Law I	3
Oral Communication	Choose any Oral Communication listed	3
Quantitative Reasoning	MAT*H167 Principles of Statistics	3
Scientific Knowledge [◊]	Choose any Scientific Knowledge listed	3-4
Scientific Reasoning [◊]	Choose any Scientific Reasoning listed	3-4
Social Phenomena	ECN*H101 Principles of Macroeconomics	3
Written Communication	ENG*102 Literature and Composition or ENG*200 Advanced Composition	3
Program Requirements	ACC*H113 Principles of Financial Accounting	3
	ACC*H117 Principles of Managerial Accounting	3
	BMK*H201 Principles of Marketing	3
	ECN*H102 Microeconomics	3
	BBG*H232 Business Law II	3
	BBG*H210 Business Communications	3
	BMK*H207 Consumer Behavior	3
	CSA*H207 Computer Applications in Management and Marketing	3
	Program Elective [†]	3
Business Program Elective ^{††}	3	

Total Credits: 61-62

Any given course may only be used to satisfy one of the competency areas even if it is listed under more than one.

[†]Prefer BMG*H202 Principles of Management

^{††} Selection in Consultation with Business Division Faculty Advisor

[◊] At least one Scientific Knowledge and Understanding OR Scientific Reasoning course must have a lab component.

Program Outcomes

Upon successful completion of all program requirements, graduates will be able to:

1. Identify and develop solutions to marketing issues required to meet customers' needs.
2. Develop a marketing plan containing effective marketing vehicles.
3. Apply the concepts of "Total Quality Management."
4. Apply the concept of "Total Customer Service" and function as a customer service representative.
5. Apply market research methodologies to the business marketing issues.
6. Apply the Sales and Customer Service Process to the business' needs.
7. Prepare marketing material to include: sales literature, customer proposals, point-of-sale literature, and promotion plans for the consumer, trade and sales force.
8. Possess the following computer skills: database management, wordprocessing, internet marketing, desktop publishing, and sales and customer service information systems configuration.
9. Communicate clearly both verbally and in writing.

MATHEMATICS/SCIENCE

The Mathematics/Science Program provides the fundamentals in mathematics and the sciences, enabling students to continue their education in mathematics, the physical sciences, the biological sciences and computer science. Students may enter the areas of science and technology, or should use the program for pre-engineering, pre-medicine, or transfer to a four-year institution, etc. Students should consult with the STEM Division early to determine specific electives.

General Education Core course listings and definitions appear on pages 53-54. Additional courses may be required. The suggested sequence for full-time students is shown below. Note: To complete the degree in two years, students are advised to complete the courses in the sequence listed beginning in the fall semester.

Competency or Program Requirement	Course Number and Title	Required Credits
FIRST SEMESTER		
Continuing Learning/Information Literacy and Ethics	Choose any Continuing Learning/Information Literacy and Ethics listed	3
Critical Analysis and Logical Thinking/ Written Communication	ENG*H101 Composition	3
Quantitative Reasoning	MAT*H172 College Algebra or higher	3-4
Scientific Knowledge and Understanding	See footnote ^o	4
General Elective	Choose any credit-bearing course	3
SECOND SEMESTER		
Oral Communication	Choose any Oral Communication listed	3
Scientific Reasoning	See footnote ^o	4
Social Phenomena	Choose any Social Phenomena listed	3
Written Communication	ENG*H102 Literature & Composition or ENG*H200 Advanced Composition or ENG*H202 Technical Writing	3
Program Requirement	Choose any Directed Elective [†] (choose from list below) or MAT*H185 Trigonometric Functions if pre-requisite for Calculus I is needed	3-4
THIRD SEMESTER		
Aesthetic Dimensions/Written Communication	Choose any Aesthetic Dimensions/ Written Communication listed (except HRT*H202)	3
Program Requirement	MAT*H254 Calculus I	4
Program Requirement	Choose any Directed Elective [†] (choose from list below)	4
General Elective	Choose any credit-bearing course	3
FOURTH SEMESTER		
Historical Knowledge and Understanding	Choose any Historical Knowledge and Understanding listed	3
Program Requirement	Choose any Directed Elective [†] (choose from list below)	4
Program Requirement	Choose any Directed Elective [†] (choose from list below)	4
General Elective	Choose any credit-bearing course	3

Total Credits: 60-62

Any given course may only be used to satisfy one of the competency areas even if it is listed under more than one.

[†]Directed electives:
AST*H101 or H111
BIO*H121 or above
CHE*H121 or above
GLG*H121
MAT*H167 or above
MET*H101
PHY*H121 or above
RES H200

^oFor Scientific Knowledge and Understanding and Scientific Reasoning, students must pick one of the following course sequences:
BIO*H121 General Biology I (first semester) and
BIO*H122 General Biology II (second semester) or
BIO*H155 General Botany (first semester) and
BIO*H145 General Zoology (second semester) or
CHE*H121 General Chemistry I (first semester) and
CHE*H122 General Chemistry II (second semester) or
PHY*H221 Calculus-Based Physics I (first semester) and
PHY*H222 Calculus-Based Physics II (second semester)

Program Outcomes

Upon successful completion of all program requirements, graduates will be able to:

1. Communicate effectively.
2. Be proficient in mathematics through calculus.
3. Have strong, varied science background.
4. Transfer to four-year institutions.

MATHEMATICS/SCIENCE**Chemistry Option**

The Chemistry Option provides a good preparation for employment in the chemical or pharmaceutical industries. This option can also be used as a transfer program for students who plan to continue their baccalaureate education in the fields of chemistry, biochemistry, environmental science, or materials science.

General Education Core course listings and definitions appear on pages 53-54. Additional courses may be required. The suggested sequence for full-time students is shown below. Note: To complete the degree in two years, students are advised to complete the courses in the sequence listed beginning in the fall semester.

Competency or Program Requirement	Course Number and Title	Required Credits
FIRST SEMESTER		
Continuing Learning/Information Literacy and Ethics	Choose any Continuing Learning/Information Literacy and Ethics listed	3
Critical Analysis and Logical Thinking/Written Communication	ENG*H101 Composition	3
General Elective	Choose any credit-bearing course(s)	1-3
Quantitative Reasoning	MAT*H172 College Algebra	3
Scientific Knowledge and Understanding	CHE*H121 General Chemistry I	4
SECOND SEMESTER		
Aesthetic Dimensions/Written Communication	Choose any Aesthetic Dimensions/Written Communication listed	3
Oral Communication	Choose any Oral Communication listed	3
Scientific Reasoning	CHE*H122 General Chemistry II	4
Social Phenomena	Choose any Social Phenomena listed	3
Written Communication	ENG*H102 Literature & Composition or ENG*H200 Advanced Composition or ENG*H202 Technical Writing	3
Program Requirement	MAT*H185 Trigonometric Functions	3
THIRD SEMESTER		
Aesthetic Dimensions/Written Communication	Choose any Aesthetic Dimensions/Written Communication listed	3
Program Requirement	MAT*H254 Calculus I	4
Program Requirement	CHE*H211 Organic Chemistry I	4
Program Requirement	PHY*H121 General Physics I or PHY*H221 Calculus-Based Physics I (for students that wish to transfer into an American Chemical Society certified program)	4
FOURTH SEMESTER		
Historical Knowledge and Understanding	Choose any Historical Knowledge and Understanding listed	3
Program Requirement	MAT*H256 Calculus II	4
Program Requirement	CHE*H212 Organic Chemistry II	4
Program Requirement	PHY*H122 General Physics II or PHY*H222 Calculus-Based Physics II (for students that wish to transfer into an American Chemical Society certified program)	4

Total Credits: 60-62

Any given course may only be used to satisfy one of the competency areas even if it is listed under more than one.

Program Outcomes

Upon successful completion of all program requirements, graduates will be able to:

1. Understand atomic theory, chemical bonding, solution chemistry, acid-base theory, titration curves, reduction, oxidation, kinetics, thermodynamics, and nuclear chemistry.
2. Demonstrate good laboratory practice in the areas of handling gases, liquids, and solids, using vacuum pumps, heating reagents and the measurement of temperature, filtration, and distillation.
3. Be able to utilize mathematics, including calculus to solve problems in chemistry.
4. Understand organic chemistry nomenclature.
5. Understand inorganic chemistry nomenclature.
6. Perform basic organic synthesis reactions.
7. Utilize a computer to present data in a proper technical report.
8. Utilize a computer to generate graphs from data, and then interpret the graph.
9. Calibrate and operate analytical equipment.
10. Utilize material safety data sheets and safely handle hazardous materials.
11. Safely work with compressed gases.
12. Understand the scientific principles associated with electricity, the laws of motion, mechanics, light, and sound.
13. Communicate orally and in written form.

MECHANICAL ENGINEERING TECHNOLOGY

This program is accredited by the Engineering Technology Accreditation Commission of ABET, <http://www.abet.org>.

Mechanical engineering deals with POWER, and with the machinery used to convert power to useful work. The mechanical engineering technician is a practically-oriented member of the engineering team which applies existing technology to the solution of engineering problems. The mechanical engineering technician designs machines and processes used to generate and apply power to useful purposes. For example, a mechanical engineering technician may assist in the design of a power plant, testing of a space shuttle, manufacturing of a nuclear submarine, or building of an aircraft carrier.

Naugatuck Valley Community College's Mechanical Engineering Technology Program combines theory with laboratory experience. Subjects such as mathematics, physics, engineering mechanics, fluid mechanics, materials of engineering, thermodynamics, and mechanical design are included within the curriculum. After the theory is taught, it is applied to practical situations in the laboratories, which are supervised by professional engineers. Students learn how to set up and conduct an experiment, to extract and analyze engineering data, and to solve problems which require the application of engineering principles.

As a result of the training and preparation provided by our program, the Mechanical Engineering Technology student is ready to be employed by industry upon graduation. The blend of 'hands-on' experience with theoretical background, the applications to current technology, and the individual initiative that the student develops, make our graduates very marketable in the workforce. Graduates of the Mechanical Engineering Technology Program are successfully employed in many different industries in such positions as: laboratory technicians, field service technicians, design engineering technicians, application engineering technicians, and plant engineering technicians.

General Education Core course listings and definitions appear on pages 53-54. Additional courses may be required. Note: The Mechanical Engineering Technology (MET) program is highly sequenced. To complete the degree in two years, students are advised to complete the courses in the sequence listed beginning in the fall semester.

Competency or Program Requirement	Course Number and Title	Required Credits
FIRST SEMESTER		
Continuing Learning/Information Literacy and Ethics	TCN*H101 Introduction to Mechanical Engineering Technology	3
Critical Analysis and Logical Thinking/ Written Communication	ENG*H101 Composition	3
Quantitative Reasoning	MAT*H172 College Algebra	3
Program Requirement	MFG*H104 Manufacturing Processes	4
Program Requirement	CAD*H150 CAD 2D	3
SECOND SEMESTER		
Scientific Knowledge	CHE*H121 General Chemistry I	4
Scientific Reasoning	PHY*H121 General Physics I	4
Written Communication	ENG*H102 Introduction to Literature and Composition, ENG*H200 Advanced Composition or ENG*H202 Technical Writing	3
Program Requirement	MAT*H185 Trigonometric Functions	3
Program Requirement	CAD*H200 3D CAD Modeling	4
THIRD SEMESTER		
Oral Communication	Choose any Oral Communication listed, except ESL*H157 - COM*H173 Public Speaking suggested	3
Program Requirement	MEC*H114 Statics	3
Program Requirement	MAT*H254 Calculus I	4
Program Requirement	EET*H102 Electrical Applications	3
Program Requirement	MEC*H271 Fluid Mechanics or MEC*H240 Fundamentals of Heat and Thermodynamics	4
FOURTH SEMESTER		
Social Phenomena	PSY*H111 General Psychology I	3
Program Requirement	CAD*H285 Computer Integrated Manufacturing I	3
Program Requirement	MEC*H251 Materials Strength	4
Program Requirement	MEC*H238 Dynamics	4

Total Credits: 65

Any given course may only be used to satisfy one of the competency areas even if it is listed under more than one.

Program Educational Objectives (PEOs)

Upon successful completion of all program requirements, graduates will:

1. Possess the educational background to do one or both of the following:
 - a. Obtain employment in Mechanical Engineering Technology or other related field.
 - b. Continue studies toward a Bachelor's Degree in Mechanical Engineering Technology or other related field.
2. Perform effectively individually or as a member of a team working on Mechanical Engineering projects in industry or academia.
3. Act with the high professional, moral and ethical standards expected of a Mechanical Engineering Technician.

Student Outcomes (SOs)

Upon successful completion of all program requirements, graduates will be able to:

1. Conduct experiments using appropriate tools and technology to collect, analyze and interpret data.
2. Prepare technical reports and present such reports to appropriate audiences.
3. Create machine parts using CAD.
4. Use mathematics, science and engineering principles to conduct force and stress analysis.
5. Use mathematics, science and engineering principles to conduct thermo-fluid analysis.
6. Understand and perform the common manufacturing processes used in industry.
7. Work effectively as a member of a diverse technical team.
8. Engage in continuous learning.
9. Commit to quality, timeliness and continuous improvement.
10. Apply and practice the Code of Ethics for the Mechanical Engineering Technology profession.

Also see: Computer-Aided Drafting/Design Engineering Technology
Electronic Engineering Technology
Engineering Technology
Manufacturing (Automated) Engineering Technology

NURSING R.N.**CONNECTICUT COMMUNITY COLLEGE NURSING PROGRAM**

*Capital Community College, Gateway Community College, Naugatuck Valley Community College
Northwestern Connecticut Community College, Norwalk Community College, Three Rivers Community College*

The Connecticut Community College Nursing Program (CT-CCNP) is an innovative associate degree nursing program offered at six Connecticut Community Colleges (<http://www.ct.edu/academics/nursing>). The nursing program is a four semester program designed to prepare registered nurses to function in the professional role utilizing current standards of nursing practice. The curriculum is built upon courses from the social and biological sciences, liberal arts, and nursing. These courses provide the foundation for the practice of nursing. Six core values—critical thinking, safe and competent practice, caring, professionalism, communication, and holistic care—provide the framework for organizing the nursing curriculum.

A graduate of the nursing program is awarded an Associate in Science degree and is eligible to take the National Council Licensing Examination for Registered Nurses (NCLEX-RN). Graduates can apply for licensure through the Connecticut Department of Public Health. The graduate is prepared to function as an entry-level practitioner in health care settings such as: general or specialty hospitals, extended care facilities, doctors' offices, and clinics. Each of the six campuses are individually approved by the Connecticut State Board of Examiners for Nursing with the consent of the Commissioner of the Connecticut Department of Public Health and accredited by the Accreditation Commission for Education in Nursing (ACEN), 3343 Peachtree Road, NE, Suite 850, Atlanta, Ga 30326. Telephone: (404) 975-5000 / Fax:(404) 975-5020 / Email: info@acenursing.org / Website: www.acen.org

ADMISSION PROCESS**Application Period**

The application period for the nursing program is November 1 - February 1 each year. All CT-CCNP applicants must complete the online nursing program application and submit all related documentation to the Admissions Office at the College of First Choice by the February 1st deadline. The "College of First Choice" is the college that the applicant would most like to attend.

Applicants may select a 2nd choice college at the initial time of application which will eliminate the necessity to apply to more than one college. An applicant should only list the college(s) to which s/he would be willing to commute.

All application materials should be sent to the Admission Office at the College of First Choice and must be postmarked to the College of First Choice no later than February 1. *Late applications and transcripts will not be accepted.* All applications that are completed by the February 1 deadline will be reviewed; applicants will be notified prior to May 1 as to their admission status.

Advisors/Counselors are available at each college to guide applicants through the application process.

All initial communication with students will be done through email. Late applications and transcripts will not be accepted.

Applications for the 2017-2018 academic year will be available online on November 1.

Please note: information is subject to change.

NURSING R.N.**Application Requirements**

Students are required to submit the following by the **February 1 deadline**:

- General College application submitted to the college of first choice (*separate from the nursing program application*) with application fee of \$20.00 for first-time applicants to any of the twelve Connecticut Community Colleges.
- Connecticut Community College Nursing Program (CT-CCNP) common application (the application is only available online).
- Proof of high school completion.
- If the student is using their high school chemistry to satisfy the admission requirement; official high school transcripts are required.
- Official SAT I and/or ACT score reports, if applicable (see page 6 for clarification of the Nursing Information Packet).
- Official College/University transcripts from ALL colleges ever attended (including all CT Community Colleges), regardless of the age of the transcripts and applicability to the nursing program.*
- Official TEAS results, if not taken at a CT Community College.
- Proof of immunizations- consult with your college of first choice for current immunization requirements.

*All transcripts must be final transcripts. Students taking courses in the fall or winter semester prior to applying must submit transcripts that include their fall & winter grades. **Transcripts must be submitted regardless of the age of the transcripts and applicability to the nursing program. This includes any college credits earned while in high school.**

Students who have attended or are currently attending one of the twelve CT Community Colleges must submit community college transcripts from all previously attended Connecticut Community Colleges to the College of First Choice. No deadline extensions will be given to applicants who fail to submit required transcripts from the CT Community Colleges by the application deadline.

APPLICATION PROCESS**How to Apply**

Please note: Applicants without a community college net ID must first submit a general college application to their college of first choice.

Please visit www.ct.edu/academics/nursing.

Current and prospective nursing students can find information about applying to the program, information sessions, the program of study, student handbook, scholarships, educational advancement opportunities towards a BSN/BS or higher in nursing, and much more at www.ct.edu/nursing.

The application for nursing is available from November 1 - February 1. After submitting the general application to your college of first choice, go to the "Selective Programs" tab in Banner Self-Service to complete the nursing application.

Please note that all communication, including admissions decisions, will be sent to your **community college student email address**.

Questions regarding the admissions process can be directed to ctccnpadmissions@ct.edu.

Please make sure to read the instructions before submitting your application. It is recommended that applicants use a PC rather than a Mac when attempting to access the online application. Once your online application has been submitted, you will receive a confirmation email.

ADMISSION REQUIREMENTS

- High School graduate or equivalent.
- A score of 40 or higher on the College Level Math portion of the Accuplacer; OR SAT I Math score of 550 or higher; OR a score of 22 or higher on the ACT Math test; OR Connecticut Community College **MAT*136** or **137**, or equivalent or higher, **with a grade of C** or higher, completed prior to application deadline of February 1.
- One year of high school Chemistry with a lab or Connecticut Community College **CHE*111** or equivalent **with a grade of C or higher**, completed within five years prior+ to application deadline of February 1.
- A passing score on the computer proficiency test++ or completion of Connecticut Community College **CSA*105**, **CSA*106** or **CSC*101** or equivalent, **with a grade of C or higher**, completed prior to application deadline of February 1.
- Connecticut Community College **ENG*101**: English Composition, or equivalent, **with a grade of C or higher**, completed prior to application deadline of February 1.
- Connecticut Community College **BIO*211**: Anatomy and Physiology I, or equivalent, **with a grade of C+ or higher**, completed within five years prior+ to application deadline of February 1.
- Connecticut Community College **BIO*212**: Anatomy and Physiology II, or equivalent, **with a grade of C+ or higher**, completed within five years prior+ to application deadline of February 1 or completed during, but no later, than the spring semester of application year.

ADMISSION REQUIREMENTS (continued)

- **2.70 Nursing GPA**- based only on the college courses with grades that meet the nursing admission and nursing program curriculum requirements. The Nursing GPA is a calculation specific to CT-CCNP applicants and may differ from your college GPA. (please note: if an applicant is using a course from a Fresh Start semester to meet a nursing admission or program curriculum requirement, that course will count in the calculation of the applicant's Nursing GPA.)
- **ATI-TEAS score.** Applicants must have an **adjusted individual total score of 53.3% or higher**, and must be submitted by February 1.

*“Five years prior” is defined as having completed the course between December 2011 and February 1, 2017.

There may be prerequisite courses that must be successfully completed prior to taking the admission requirements. Challenge exams may exist for certain admission requirements. Please consult with your College of First Choice for additional information. Students should complete the required Accuplacer computerized placement test. The placement test may be waived for students who have prior college English and/or mathematics credits.

ADVANCED PLACEMENT

Licensed Practical Nurse

LPN Graduates from the Connecticut Technical High School System (CTHS). A memorandum of understanding (MOU) is in place for CT-CCNP applicants that have graduated from an LPN program at one of the Connecticut Technical High Schools. This MOU is in place for LPN's that graduated from a CTHS beginning in 2010. Please note, the application process does not vary for LPN candidates.

Applicants with an LPN License. The Connecticut Community College Nursing Program (CT-CCNP) participates in the Connecticut League for Nursing Articulation Model for Nursing Education Mobility for LPN's. To be eligible for articulation, the LPN must:

- Hold a current license to practice as an LPN in Connecticut.
- Satisfy all the CT-CCNP admission requirements.
- Submit a CT-CCNP application and be admitted to the program. Please note, the application process does not vary for LPN candidates.

Clinical Sites

Clinical learning experiences are planned as an integral part of the nursing courses and are held at a variety of healthcare settings, such as: hospitals, extended care facilities, and selected community health centers. Students are responsible for arranging their own transportation to and from assigned clinical sites. Clinical experiences may be assigned during daytime, evening, or weekend hours. Assignment of clinical sites is at the discretion of the nursing faculty.

Waiver of Licensure Guarantee

Upon successful completion of the Associate of Science degree with a major in Nursing, the graduate is eligible to take the National Council of State Boards of Nursing's Licensure Examination for Registered Nurses (NCLEX-RN). Graduation from the CT-CCNP does not guarantee licensure to practice nursing. Licensure requirements and procedures are the responsibility of the Connecticut Department of Public Health, State Board of Examiners for Nursing. Permission to take the NCLEX-RN examination is established by law and granted by the Connecticut State Board of Examiners for Nursing.

NURSING R.N.**CONNECTICUT COMMUNITY COLLEGE NURSING PROGRAM**

*Capital Community College, Gateway Community College, Naugatuck Valley Community College
Northwestern Connecticut Community College, Norwalk Community College, Three Rivers Community College*

Competency or Program Requirement	Course Number and Title	Required Credits
ADMISSION REQUIREMENTS		
Continuing Learning and Information Literacy/Ethics	CSA*H105 Introduction to Software Applications or CSC*H101 Introduction to Computers	See advisor
Critical Analysis and Logical Thinking/ Written Communication	ENG*H101 Composition	3
Scientific Knowledge [◊]	BIO*H211 Anatomy and Physiology I	4
Scientific Reasoning [◊]	Prerequisite - BIO*H212 Anatomy and Physiology II	4
FIRST SEMESTER (fall)		
Program Requirement	NUR*H101 Introduction to Nursing Practice	8
Program Requirement	BIO*H235 Microbiology [†]	4
Program Requirement	PSY*H111 General Psychology [†]	3
SECOND SEMESTER (spring)		
Social Phenomena	SOC*H101 Principles of Sociology [†]	3
Program Requirement	NUR*H102 Family Health Nursing	8
Program Requirement	PSY*H201 Life Span Development [†]	3
Program Requirement	NUR*H103 Pharmacology for Families Across the Lifespan	1
THIRD SEMESTER (fall)		
Aesthetic Dimensions/Written Communication	ENG*H102 Literature and Composition	3
Program Requirement	NUR*H201 Nursing Care of Individuals and Families I	9
Program Requirement	NUR*H202 Pharmacology for Individuals and Families with Intensive Health Care Needs	1
FOURTH SEMESTER (spring)		
Oral Communication	COM*H100 Introduction to Communication [†]	3
Program Requirement	NUR*H203 Nursing Care of Individuals and Families II	8
Program Requirement	NUR*H204 Pharmacology for Individuals, Families and Groups with Complex Health Care Needs	1
Program Requirement	NUR*H205 Nursing Management and Trends	2

Program Outcomes

The graduate will:

1. Integrate the principles of the natural, physical, social, biological, and behavioral sciences, and nursing theory to provide holistic care to individuals, families, and groups across the wellness-illness continuum.
2. Integrate the nursing process as a critical thinking skill for decision making in nursing practice.
3. Provide safe and competent care to individuals, families, and groups grounded in evidenced-based practice, quantitative competencies, and technological proficiency.
4. Integrate effective communication skills through professional interactions with individuals, families, groups and the health care team.
5. Create an environment where therapeutic interventions reflect a respect for human dignity.
6. Collaborate as a member of a multidisciplinary health team.
7. Integrate accountability and responsibility for practice within the legal and ethical standards of the nursing profession.
8. Function in the professional role utilizing current standards of nursing practice.

Total Credits: 68 (General education credits: 30 / Nursing credits: 38)

Any given course may only be used to satisfy one of the competency areas even if it is listed under more than one.

[†]There may be a **prerequisite course** that must be successfully completed prior to taking the course.

Nursing Credits:

Classroom - one contact hour = 1 credit

Clinical - three contact hours = 1 credit

Norwalk Community College requires one interdisciplinary course to fulfill core curriculum requirements.

Non-Nursing courses may be taken in the semester indicated above or they may be taken earlier (with a minimum of a C grade).

Nursing courses must be taken in the stated sequence.

[◊] At least one Scientific Knowledge and Understanding OR Scientific Reasoning course must have a lab component.

PHYSICAL THERAPIST ASSISTANT

The Physical Therapist Assistant (PTA) Program at Naugatuck Valley Community College is accredited by the Commission on Accreditation in Physical Therapy Education (CAPTE), 111 North Fairfax Street, Alexandria, VA 22314. Phone: 703-706-3245; Email: accreditation@apta.org; Website: www.capteonline.org.

The PTA works under the direction and supervision of a physical therapist and is a valued member of the healthcare team. Career opportunities are in hospitals, school systems, private offices, home health agencies, industry, rehabilitation hospitals and nursing homes. This is a two year, full-time curriculum for an Associate in Science degree. More than 90 physical therapy clinics from around the state collaborate with this program to provide internships. The course of study begins in January and includes a minimum of 66 credits.

In reading this section candidates must note the special requirements of this program. Additional information may be found on the PTA webpage, www.nv.edu/pta.

Selective Admission Requirements

1. Submit a PTA program application, in addition to the college application for admission, and an official final high school transcript indicating date of graduation, General Education Development (GED) Diploma, or State High School Equivalency Diploma. Submit all application materials, including college transcripts from all previous colleges attended, by October 15th for consideration for the upcoming spring semester.
2. Courses which must be completed by the application deadline of October 15th to meet these requirements are:
 - BIO*211 Anatomy & Physiology I (minimum grade of C+)
 - ENG*101 Composition
 - MAT*Elective (Any Quantitative Reasoning course higher than MAT*H136/H137 and minimum grade of C+)
 - Aesthetic Dimensions / Written Communications (3 credit general education elective)
3. All Math elective and BIO*211 and BIO*212 courses must be completed within five (5) years prior to entering the PTA Program.
4. Earn a minimum PTA GPA of 2.5 for coursework required for the degree. A minimum of "C+" for Math elective and BIO*211 and BIO*212 and minimum grade of "C" is required for all other courses for the degree.
5. Documented volunteer/observational experience totaling a minimum of 10 hours in each of an out-patient and an in-patient physical therapy setting (minimum 20 hours total) completed prior to application deadline.
6. Complete the Nursing TEAS (version 5.0 with Adjusted Individual Score (AITS) of 50% or higher or version ATI TEAS (beginning 8/2016) with score equivalent to AITS of 50% or higher), by October 15, 2016. Test scores will be valid for the three (3) years prior to the application deadline. For testing schedules, registration information, and study manual information go to www.atitesting.com. Applicants that have not taken the exam at a CT Community College must arrange to have their scores sent to NVCC.
7. All applicants must attend a PTA Program Information Session. Students are highly recommended to observe a laboratory class. Please refer to the website for additional information.
8. Students must be able to perform common physical therapy functions as defined in the program's Essential Requirements. Please go to www.nv.edu/pta under "Application Requirements" for a copy of this document.
9. In addition to tuition and fees, students in the PTA Program must pay for books, APTA membership, appropriate attire for internships, licensure review course, and transportation. Students must complete and verify all required immunizations and provide certification by the American Heart Association or American Red Cross in Basic Life Support (BLS) for the Health Care Provider before the start of clinical activities.
10. Clinical Education Experiences: The NVCC PTA Program offers clinical education experiences throughout Connecticut. Students may be required to travel more than 75 minutes to their assigned clinical site. Students are required to provide their own transportation, living expenses (as necessary), health insurance (if required by the facility), and any other expenses while on clinical education experiences.
11. Students will be required by the program to undergo a background check for felony convictions and may be required by a healthcare facility to undergo a drug/substance screening. Students who do not pass the background check and/or a drug screening may be excluded from the clinical site and may not be able to meet the competencies required for graduation from the program, may not be eligible to take the licensure exam and/or may not be eligible for PTA licensure.

Learning is planned as a progression of increasing complexity. The general education courses are supportive of the PTA courses. Therefore, all courses must be taken in sequence and/or no later than scheduled in the PTA curriculum. General education core classes and electives may be taken prior to entering the PTA program or completed earlier. Applicants are encouraged to complete the general education core classes and electives prior to entering the PTA Program. Applicants are required to submit evidence of 20 hours of observation of physical therapy services (10 hours in-patient and 10 hours out-patient). Applicants are required to attend a program information session. A minimum grade of "C" is required for all degree requirements, a minimum grade "C+" in BIO*211, BIO*212 and mathematics elective (higher than MAT*H136/H137), and an evaluation of "Pass" indicating satisfactory completion must be attained in clinical internship courses in order to progress. The faculty reserves the right to withdraw a student whose clinical performance is unsatisfactory. Attendance for class, lab, and clinical experience is required. Sixty-six (66) semester hours are required for graduation from the PTA Program.

General Education Core course listings and definitions appear on pages 53-54. Placement testing will determine the sequencing of courses. Additional courses may be required. The suggested sequence for full-time students is shown below. Refer to page 53 for a listing of courses that will satisfy elective requirements.

PHYSICAL THERAPIST ASSISTANT

Competency or Program Requirement	Course Number and Title	Required Credits
ADMISSION REQUIREMENTS		
Aesthetic Dimensions/Written Communications ⁺	Choose Any Aesthetic Dimensions/ Written Communications listed	3
Critical Analysis and Logical Thinking/ Written Communication ⁺	ENG*H101 Composition	3
Quantitative Reasoning [⊖]	Choose any Quantitative Reasoning listed higher than MAT*H136/H137	3
Scientific Knowledge ^{⊖⊖}	BIO*H211 Anatomy and Physiology I	4
FIRST SEMESTER (spring)		
Continuing Learning and Information Literacy/Ethics - Program Requirement	PTA*H120 Introduction to Physical Therapy (Continuing Learning/Info Literacy/Ethics)	3
Continuing Learning and Information Literacy/Ethics - Program Requirement	PTA*H125 PT for Function (Continuing Learning/ Information Literacy/Ethics)	4
Scientific Reasoning ^{⊖⊖}	BIO*H212 Anatomy and Physiology II	4
Written Communication ⁺	ENG*102 Literature and Composition	3
SECOND SEMESTER (fall)		
Oral Communication ⁺	COM*H100 Introduction to Communications	3
Social Phenomena ⁺	PSY*H111 General Psychology I	3
Program Requirement	PTA*H230 Physical Agents in Physical Therapy	4
Program Requirement	PTA*H235 Kinesiology for Rehabilitation	4
THIRD SEMESTER (spring)		
Historical Knowledge ⁺	Choose Any Historical Knowledge Listed	3
Program Requirement	PTA*H250 Therapeutic Exercise	5
Program Requirement	PTA*H253 Pathophysiology for Rehabilitation	3
Program Requirement	PTA*H258 PTA in the Healthcare Arena	2
FOURTH SEMESTER (fall)		
Program Requirement	PTA*H260 Physical Therapy Seminar	2
Program Requirement	PTA*H262 PTA Internship II	5
Program Requirement	PTA*H265 PTA Internship III	5

Total Credits: 66 (General education credits: 29 credits / PTA credits: 37)

Any given course may only be used to satisfy one of the competency areas even if it is listed under more than one.

⁺ There may be a prerequisite course that must be successfully completed prior to taking the course.

[⊖] MAT*H137 and courses numbered lower than MAT*H137 will not transfer to Connecticut State Universities as Quantitative Reasoning courses.

^{⊖⊖} At least one Scientific Knowledge and Understanding OR Scientific Reasoning course must have a lab component.

Program Mission

In keeping with the mission of Naugatuck Valley Community College (NVCC), the NVCC Physical Therapist Assistant (PTA) program is committed to a high standard of scholarship as it provides affordable, optimal learning experiences in a diverse setting that will prepare students to provide the highest quality of patient care. The PTA program trains, educates, and cultivates entry-level physical therapist assistant students who strive for excellence as PTAs with the knowledge, clinical skills and professional behaviors essential to the PTA. Designed for the optimal use of clinical and educational resources across Connecticut, this program embodies a dedicated community-engaging curriculum committed to the development and achievement of successful student PTAs in support of economic growth of the state. The structure drives our emphasis on technology and communication to facilitate learning in the classroom and the clinic as the program endeavors to educate students who:

- strive for excellence as PTAs.
- commit to high ethical standards.
- appreciate and value racial, social and cultural diversity.
- demonstrate critical reflection and self-assessment.
- invest in community improvement.
- engage in lifelong learning.

Program Outcomes

The goal of the PTA program is to prepare graduates to succeed in careers as PTAs. Upon successful completion of all program requirements, the Physical Therapist Assistant program will prepare graduates whom:

1. Adhere to ethical, professional behavior, legal, regulatory, and licensure standards within their scope of work as a physical therapist assistant.
2. Demonstrate skill competence in the cognitive, psychomotor, and affective processes necessary to provide safe physical therapy services under the direction and supervision of a physical therapist.
3. Engage in evidence-based practice, responding to the dynamics of a changing healthcare system.
4. Integrate the principles of the natural, physical, social, biological, and behavioral sciences, and physical therapy theory to provide holistic care to individuals, families and groups across the wellness-illness continuum.
5. Integrate effective communication skills through professional interactions with patients, families, groups and the interdisciplinary healthcare team with altruism and diversity awareness.
6. Complete the Nursing TEAS (version 5.0 with Adjusted Individual Score (AITS) of 50% or higher or version ATI TEAS (beginning 8/2016) with score equivalent to AITS of 50% or higher), by October 15, 2016. Test scores will be valid for the three (3) years prior to the application deadline. For testing schedules, registration information, and study manual information go to www.atitesting.com. Applicants that have not taken the exam at a CT Community College must arrange to have their scores sent to NVCC.
7. Sit for the examination for state licensure as a physical therapist assistant.
8. Commit to a lifelong process of self-improvement and learning by participating in activities for improvement of their abilities as physical therapist assistants.
9. Achieve an effective transition from this educational program to a physical therapist assistant career.

RADIOLOGIC TECHNOLOGY

The radiologic technologist is the technical assistant to the radiologist, (a physician who specializes in the use of x-rays and radioactive isotopes). Since x-rays are an important tool for the diagnosis of disease, radiologic technologists are valued members of the health team.

Admission Requirements

The applicant must meet the following requirements in addition to the general admission policies:

1. High school diploma or equivalency and submission of all application materials including high school transcripts, immunization records, and college transcripts, if applicable, no later than the application deadline.
2. Prerequisites:
 - Minimum of having completed, within the last 5 years, high school algebra II with a grade of "C" or better AND a placement or SAT/ACT score above intermediate algebra; OR MAT*H137 or college level equivalent with a grade of "C" or better.
 - Minimum of having completed high school or college level Biology with a lab, or equivalent, within the last five years with a grade of "C" or better. Completion of an additional high school or college level science course within the last five years with a grade of "C" or better.
 - (NVCC A & P I requires BIO*H105 or BIO 115. The BIO*H105 requirement may be achieved by successful completion of CLEP or examination administered by the Math/Science Division.)
3. Qualified achievement on College Placement Tests. Remedial courses must be completed before acceptance into the program.
4. Application deadline is January 15 of each year. All application and program deadlines are strictly enforced. Failure to adhere to deadlines will disqualify a candidate for consideration for admission.
5. Consideration for admission requires all minimally qualified applicants to attend a mandatory program information session. Applicants will be contacted to schedule attendance at a session. The deadline to register for an information session is strictly enforced.
6. Medical examination report by a physician (within three months) which describes the physical and emotional health of the applicant. Completion and verification of all required immunizations before beginning classes.
7. Demonstrated ability to perform the skills needed to be a radiographer as outlined in the program's Technical Standards.
8. Submission of all application materials including high school transcripts, college records and radiology program records when applicable.
9. Admitted students must provide proof of a Health Care Provider course in Basic Life Support (BLS) from the American Heart Association prior to beginning class. The Division of Continuing Education offers BLS courses throughout the summer.
10. Selection of candidates for admission is based upon academic history of the applicant. Overall high school and/or college GPA, Math GPA, Science GPA, and successfully completed general education courses in the radiology curriculum are used to rank candidates. A minimum GPA of 2.50 is required by all applicants seeking admission into the Radiologic Technology Program
11. The American Registry of Radiologic Technologists (ARRT) requirements concerning individuals with a previous criminal conviction may eliminate a student from sitting for the certification examination. A previous criminal record includes but may not be restricted to misdemeanor drug possession charges, DUI, felony convictions, military court martial, and proceedings where a plea of nolo contendere was entered. Individuals may contact the ARRT at (615) 687-0048 privately for clarification of their eligibility status. ARRT certification is required to obtain a radiographer's license in Connecticut and many other states. Additional information may be found at www.artt.org.

Additionally, all accepted students may be required to undergo a criminal background check prior to the start of the first-year fall semester. The student is responsible for the cost of the background check. Students who do not pass a criminal background check may be excluded from the clinical site and may not be able to meet the competencies required for the program. If you feel that this may apply to you, please consider your acceptance into the NVCC Radiologic Technology Program carefully. If you have any questions, please call the Director of Allied Health, Nursing and Physical Education at 203-575-8057.

An evening clinical track is available to four incoming students in the first year fall and spring semesters. Students attend radiology classes during the day. Prior to beginning the evening clinical, all students attend a four week program orientation session during the day. During the six week summer session, evening students attend clinical on Tuesday evening and on Friday, 8:00 a.m. to 4:30 p.m. The evening students are matriculated into the day clinical track for the entire second year of the program. Students interested in the evening clinical track should contact the Program Director for further information. The evening clinical track is offered based upon instructor availability and funding.

Due to the extensive time requirements for classes, clinical, and studying, program faculty strongly recommend that radiology students work no more than 20 hours a week. Faculty strongly advise applicants to consider the time requirements for studying, attending class, attending clinical, as well as their personal obligations before accepting admission.

In order to meet the educational objectives of the program as well as ensure the safety of the patient and student, attendance policies are strictly enforced.

Readmission and Transfer

Candidates seeking readmission to the program must apply to the Program Director. Readmission requests are based on a total faculty review and vote. Students withdrawn for poor academic or clinical performance are not eligible to be readmitted. Consideration for readmission or transfer into the program can only be granted if there are available openings. Transfer students are required to submit official transcripts. Transfer admission is based on a minimum GPA of 2.50. Seat availability and completed course work and sequencing of the previously completed coursework with the NVCC Radiologic Technology Program's curriculum.

RADIOLOGIC TECHNOLOGY

The Curriculum

The Radiologic Technology Program is approved by the Board of Governors for Higher Education and the Joint Review Committee on Education in Radiologic Technology (JRCERT), 20 N. Wacker Drive, Suite 2850, Chicago, IL 60606. (312) 704-5300. www.jrcert.org.

The curriculum is designed as a progression of increasing complexity. Therefore, all prescribed courses must be taken in sequence. Electives and core courses can be taken prior to the semester scheduled with the exception of the radiology courses. Clinical practicum is conducted in hospitals, offices, and imaging centers. It is necessary for the student to have adequate transportation. Students are required to purchase uniforms.

A minimum grade of "C" is required in all courses related to radiology and science courses. The faculty in the Radiologic Technology Program reserves the right to require withdrawal of a student from the Radiologic Technology Program whose clinical performance is unsatisfactory. Upon successful completion of all program requirements, students are eligible to take the American Registry of Radiologic Technologist Registry Examination. A minimum of sixty-eight (68) semester hours is required for graduation. Courses must be taken in the sequence below. General education courses may be taken prior to but cannot be taken after the semester the course is assigned.

General Education Core course listings and definitions appear on pages 53-54. Additional courses may be required. The suggested sequence for full-time students is shown below.

Competency or Program Requirement	Course Number and Title	Required Credits
FIRST SEMESTER (fall/1st yr.)		
Critical Analysis and Logical Thinking/ Written Communication	ENG*H101 Composition	3
Scientific Knowledge ^o	BIO*H211 Anatomy and Physiology I	4
Program Requirement	RAD*H112 Orientation to Radiologic Technology	3
Program Requirement	RAD*H197 Clinical Practice	2
SECOND SEMESTER (spring/1st yr.)		
Scientific Reasoning ^o	PHY*H110 Introduction to Physics	4
Social Phenomena	PSY*H111 General Psychology I	3
Program Requirement	RAD*H113 Radiologic Physics and Radiographic Quality I	3
Program Requirement	RAD*H198 Clinical Practice	2
Program Requirement	BIO*H212 Anatomy and Physiology II	4
THIRD SEMESTER (summer/1st yr.)		
Program Requirement	RAD*H114 Contrast Media Procedures and Radiographic Quality II	3
Program Requirement	RAD*H199 Clinical Practice	2
FOURTH SEMESTER (fall/2nd yr.)		
Aesthetic Dimensions/Written Communication	Choose any Aesthetic Dimensions/ Written Communication listed	3
Oral Communication	COM*H100 Introduction to Communications	3
Program Requirement	RAD*H200 Radiologic Physics & Diagnostic Imaging Modalities	3
Program Requirement	RAD*H222 Radiobiology and Protection	3
Program Requirement	RAD*H297 Clinical Practice	3
Program Requirement	PSY*H201 Lifespan Development	3
FIFTH SEMESTER (spring/2nd yr.)		
Continuing Learning and Information Literacy/Ethics	CSA*H105 Introduction to Software Applications	3
Historical Knowledge	HIS*H101 Western Civilization I, HIS*H102 Western Civilization II, HIS*H201 U.S. History I, or HIS*H202 U.S. History II	3
Program Requirement	RAD*H215 Radiographic Pathology	3
Program Requirement	RAD*H298 Clinical Practice	3
SIXTH SEMESTER (summer/2nd yr.)		
Program Requirement	RAD*H217 Seminar in Radiology	3
Program Requirement	RAD*H299 Clinical Practice	2

Total Credits: 68

Any given course may only be used to satisfy one of the competency areas even if it is listed under more than one. ^oAt least one Scientific Knowledge and Understanding OR Scientific Reasoning course must have a lab component.

Program Mission

The Radiologic Technology Program prepares students to enter the imaging sciences as an educated and skilled radiographer. The program, founded on close alliances with the professional community and the use of educational technology, creates a learning environment that prepares radiographers who:

- Combine efficiency and compassion when imaging patients.
- Practice in accordance with theoretical knowledge and essential skills.
- Maintain high ethical standards.
- Strive for continued development as a professional.
- Commit to clinical excellence.

Program Outcomes

The following goals further support the mission statement of the Radiologic Technology Program:

1. Students will demonstrate effective communication skills.
2. Students will demonstrate clinical competence when performing entry level imaging procedures.
3. Students will exhibit professional growth and development.
4. Students will combine critical thinking & problem solving skills during the performance of imaging procedures.
5. The program will graduate students with entry level skills.

Student Learning Outcomes:

- Students will demonstrate appropriate oral communication skills.
- Students will demonstrate written communication skills.
- Students will demonstrate appropriate personal and patient radiation protection.
- Students will accurately position patients.
- Students will demonstrate professional and ethical behavior.
- Students will value the importance of continued professional development
- Students will select technical factors when performing non-routine radiographic procedures.
- Students will choose appropriate positioning when performing non-routine radiographic procedures.

Clinical Affiliates:

Bristol Hospital, Charlotte Hungerford Hospital
Danbury Hospital, Diagnostic Imaging of Southbury
Greater Waterbury Imaging Center,
Naugatuck Valley Radiological Associates,
(West Main Street and Prospect locations)
Orthopaedics of New England, St. Mary's Hospital
Waterbury Hospital Health Center

RESPIRATORY CARE

The Respiratory Care Program prepares students to enter a dynamic and progressive health care profession. Respiratory Therapists work with advanced technology making it possible to help patients with respiratory and cardiac disorders in ways that were impossible years ago. The Respiratory Care program provides hands-on education in diverse clinical settings such as adult and neonatal critical care, emergency care, long-term care, pulmonary rehabilitation and diagnostic services. Respiratory Therapists are vital members of the health care team who work closely with physicians providing education and support to patients with acute and chronic lung conditions

Admissions Requirements:

The Respiratory Care Program has a selective admissions process. The applicant must meet the following requirements in addition to the general admission policies:

- High school diploma or equivalency and submission of all application materials including high school transcripts, immunization records, and college transcripts, if applicable, no later than the January 16 deadline.
- Prerequisites: Proof of having met or exceeded the following prerequisites prior to the application deadline of January 16 2017. Applicants who are enrolled in prerequisites during the spring semester may also apply but will only be considered after all other eligible candidates have accepted or declined their position. If applicable, copy of high school transcript and/or official college for credits earned outside of NVCC must be provided by January 16, 2017.
 - Minimum of having completed, within the last 5 years, high school algebra II with a grade of "C" or better AND an Accuplacer or SAT/ACT score above intermediate algebra; OR MAT*H136/H137 or college level equivalent with a grade of "C" or better.
 - BIO*H105 or BIO*H115 or BIO*H121 or equivalent within the last 5 years with a grade of "C" or better.
 - Minimum of having completed with a "C" or better developmental English (ENG *H063, ENG*H096 or equivalent); OR Accuplacer placement test results recommending ENG *H101; OR SAT/ACT results for either Reading or Writing at or above the score for placement into ENG*H101 English Composition.
- Minimum GPA of 2.5 based only on the college courses with grades that meet the Respiratory Care Admission and program curriculum requirements.
- Complete a program application by the January 16 deadline.
- Information session: Consideration for admission requires all qualified applicants to attend a mandatory program information session. In late February/early March, qualified applicants will be contacted via their college email address to schedule attendance at a session. The deadline to register for, and attendance at the information session is strictly enforced.
- Chemistry, Anatomy and Physiology I and II taken prior to admission into the program must have been taken within the following timeframe and the student must have achieved a grade of "C" or better for each of the courses:
 - Anatomy and Physiology I and II within the last 5 years
 - Chemistry within the last 8 years
- Algebra, Chemistry, and Biology (including Anatomy and Physiology I and II) taken at other colleges must be equivalent to NVCC courses in order to fulfill the program science and math prerequisites and program science requirements.
- Once your application is received, all communication regarding that application status will be sent to your college assigned email account issued at the time of your acceptance to NVCC.
- Once admitted to the program, students are required to undergo a criminal background check and drug screen. Students that do not pass the background check may be excluded from clinical practice and may not meet the competencies required for the program.
- Once your application is received, all communication regarding that

application status will be sent to your college assigned email account issued at the time of your acceptance to NVCC.

Due to the extensive time requirements for classes, clinical, and studying, the program faculty strongly recommends that respiratory care students work no more than 20 hours a week. Faculty strongly advises applicants to consider this before applying and/or before accepting an offer of admission.

Special Admission Requirements for Certified Respiratory Therapist (CRT's)

Graduates of a one year certificate program who seek admission to the program and have successfully completed the Certification Exam for Respiratory Therapists by the National Board for Respiratory Care (NBRC) will be admitted into the program as a second year student. All CRT's seeking admission into the program must provide proof of certification in order to receive credit for the following technician level courses:

RSP*H112	Fundamentals of Respiratory Care
RSP*H131	Applied Pharmacology
RSP*H121	Cardiopulmonary Anatomy and Physiology
RSP*H141	Principles of Respiratory Care
RSP*H151	Cardiopulmonary Pathophysiology
RSP*H180	Clinical Practicum
RSP*H181	Clinical Practicum II
RSP*H281	Advanced Clinical Practicum (transfer credit requires approval from the Director of Clinical Education).

Students entering the program as a CRT must complete all of the general education courses prior to graduation. All applicants will be required to take a self-assessment exam by the NBRC prior to admission to the program. This test is not used for placement into the program, but for internal purposes only.

Readmission into the Respiratory Care Program

Students seeking readmission into the respiratory care program must apply directly to the program director within 6 months of severance from the program. If readmission is granted, the student must reenter the program within 1 year from his/her point of exit. Readmission is based on faculty review, clinical evaluations, current GPA of 2.5 and evidence of interim efforts on the candidate's part to strengthen areas of weakness. Readmission is on a space available basis. Please see the Respiratory Care Student Handbook for additional information regarding readmission.

Transfer Requirements:

- Students seeking transfer into the program must apply to the Program Director by the program application deadline (January 15).
- Official transcripts must be provided with the application.
- Consideration for transfer into the Respiratory Care Program depends on whether there are available openings at the time of the request.
- Transfer admission is based on GPA and previous completed course work.
- A minimum GPA of 2.5.
- Students who were previously or are currently enrolled in another Respiratory Care program must have successfully completed their Respiratory Care and science requirements with a grade of "C" or better.
- The Program Director and the Director of Clinical Education will evaluate previous respiratory care course work for equivalency with NVCC respiratory care courses.

Student responsibilities:

Once a student has been accepted into the program, the student must assume the following responsibilities:

- Perform the skills necessary to function as a respiratory therapist as outlined in the program's technical standards.
- Provide proof of a Health Care Provider course in Basic Life Support (BLS).
- Submit a current physical examination which describes the student's health and proof of immunizations.
- Purchase required books, manuals and clinical supplies.
- Purchase required uniforms for clinical practice which conform to the program dress code.
- Transportation to and from clinical facilities.
- Follow established college policies and procedures.
- Follow established program policies and procedures as outlined in the Respiratory Care Student Handbook.

Please contact the program director for details or questions.

RESPIRATORY CARE

Learning is planned as a progression of increasing complexity. Therefore, in order for a student to progress to the next semester, a minimum grade of “C” is required in all respiratory courses. BIO*H211 and BIO*H212 must be completed with a grade of “C” or better before a student can progress to the second year of the program. Electives and other core courses may be taken prior to the designated semester. Students must achieve a “C” or better in all required courses including respiratory, science and general education courses. Graduates of the program are eligible to take the Therapist Multiple Choice and Clinical Simulation examinations administered by the National Board for Respiratory Care. .

The Respiratory Care Program at Naugatuck Valley Community College is accredited by the Commission on Accreditation for Respiratory Care, www.coarc.com. Commission on Accreditation for Respiratory Care, 1248 Harwood Road, Bedford, Texas 76021-4244 . (817) 283-2835. (Program#200460)

General Education Core course listings and definitions appear on pages 53-54. Placement testing will determine the sequencing of courses. Additional courses may be required. The suggested sequence for full-time students is shown below.

Competency or Program Requirement	Course Number and Title	Required Credits
FIRST SEMESTER (fall)		
Critical Analysis and Logical Thinking/ Written Communication	ENG*H101 Composition	3
Historical Knowledge	Choose any Historical Knowledge listed	3
Scientific Knowledge ^o	BIO*H211 Anatomy and Physiology I	4
Program Requirement	RSP*H112 Fundamentals of Respiratory Care	4
Program Requirement	RSP*H121 Cardiopulmonary Anatomy and Physiology	3
SECOND SEMESTER (spring)		
Oral Communication	COM*H100 Introduction to Communication	3
Program Requirement	RSP*H131 Applied Pharmacology	3
Program Requirement	RSP*H141 Principles of Respiratory Care	4
Program Requirement	RSP*H180 Clinical Practicum	1
Program Requirement	BIO*H212 Anatomy and Physiology II	4
THIRD SEMESTER (summer)		
Written Communication	ENG*H102 English Composition and Literature	3
Program Requirement	RSP*H151 Cardiopulmonary Anatomy and Physiology	3
Program Requirement	RSP* H181 Clinical Practicum II	2
FOURTH SEMESTER (fall)		
Continuing Learning and Information Literacy/Ethics	RSP*H281 Advanced Clinical Practicum	2
Scientific Reasoning ^o	CHE*H111 Concepts of Chemistry	4
Social Phenomena	PSY* H111 General Psychology I	3
Program Requirement	RSP*H270 Hemodynamic and Critical Care Monitoring	3
Program Requirement	RSP*H 262 Advanced Principles of Respiratory Care	4
FIFTH SEMESTER (spring)		
Aesthetic Dimensions/Written Communication	Choose any Aesthetic Dimensions/ Written Communication listed	3
Continuing Learning and Information Literacy/Ethics	RSP*H282 Advanced Clinical Practicum II	2
Program Requirement	RSP*H271 Pulmonary and Cardiovascular Diagnostics	2
Program Requirement	RSP*H291 Perinatal and Pediatric Respiratory Care	2
Program Requirement	RSP*H201 Future Trends	2

Total Credits: 67

Any given course may only be used to satisfy one of the competency areas even if it is listed under more than one.

^o At least one Scientific Knowledge and Understanding OR Scientific Reasoning course must have a lab component.

Program Mission

The Respiratory Care Program at Naugatuck Valley Community College is designed to prepare students to enter the field of Respiratory Care with the skills necessary to practice as proficient and competent Respiratory Therapists. Our program is designed to meet the evolving health care needs of our diverse community and our faculty are committed to a student-centered approach to teaching and learning that focuses on the development of evidence-based, ethical, and collaborative practice among our students and graduates.

Program Outcomes

Upon graduation from the program, the graduate must be competent in the following areas: Psychomotor skills, Affective skills and Cognitive skills. Each area will be evaluated while enrolled in the program on a semester by semester basis. Learning is planned as progression of increasing complexity. The goal of the Respiratory Care program is to prepare graduates to function as competent respiratory care practitioners. Upon successful completion of the program the graduate will:

1. Assist physicians/licensed independent practitioners in the diagnosis, management, and treatment of patients affected by cardiopulmonary disorders.
2. Collect and evaluate clinical information relevant to their role as a respiratory therapist.
3. Participate in the inter-disciplinary plan of care.
4. Provide patient education concerning health management of respiratory disease.
5. Demonstrate proficiency in all skills and competencies required of a respiratory therapist as described by the Commission on Accreditation for Respiratory Care (CoARC).
6. Promote evidence-based practice by using established clinical practice guidelines and evaluating published research for its relevance to patient care.
7. Collaborate and communicate effectively with all members of the health care team to enhance patient care.
8. Adhere to AARC statement of ethics and professional conduct.

Clinical experiences are provided at the following facilities:

Bridgeport Hospital
Connecticut Children's Medical Center
Danbury Hospital
Charlotte Hungerford Hospital
Gaylord Specialty Healthcare
Hospital for Special Care
St. Mary's Hospital
Waterbury Associates Pulmonary
Waterbury Hospital
Yale New Haven Hospital

TECHNOLOGY STUDIES

College of Technology Pathway Program

The Connecticut College of Technology Pathways program allows students to complete an associate in science degree program in Technology Studies and continue on to complete a bachelor of science degree in Industrial Technology with a focus in Technology Management at Central Connecticut State University's School of Engineering Science and Technology. The curriculum offers a broad range of studies and topics in: mathematics, physics, chemistry, engineering drawing and computer-aided design (CAD), computer-aided manufacturing (CAM), electronic engineering technologies, mechanical engineering technologies, machine technologies, and other courses in special areas of technology. The program also includes a solid core of courses in general education. Successful completion of the program allows students to enter their junior year at Central Connecticut State University. Consultation with a faculty advisor is strongly recommended.

Additional courses may be required. Note: To complete the degree in two years, students are advised to complete the courses in the sequence listed beginning in the fall semester.

Competency or Program Requirement	Course Number and Title	Required Credits
FIRST SEMESTER		
Critical Analysis and Logical Thinking/ Written Communication	ENG*H101 Composition	3
Scientific Reasoning	PHY*H110 Introductory Physics or PHY*H121 General Physics I	4
Program Requirement	CAD* course	3
Program Requirement	Directed elective [†] , ^{††}	3
Program Requirement	Directed elective ^{††}	3
SECOND SEMESTER		
Quantitative Reasoning	MAT*H185 Trigonometric Functions or higher level math course [‡]	3-4
Written Communication	ENG*H202 Technical Writing	3
Program Requirement	PHL* course	3
Program Requirement	Directed elective ^{††}	3
Program Requirement	Directed elective ^{††}	3
THIRD SEMESTER		
Continuing Learning/Information Literacy and Ethical Dimensions	ECN*H101 Principles of Macroeconomics	3
Historical Knowledge and Understanding	HIS*H101 Western Civilization I or H102 Western Civilization II or H201 U.S. History I or H202 U.S. History II	3
Oral Communication	COM*H173 Public Speaking	3
Scientific Knowledge and Understanding	CHE*H111 Concepts of Chemistry or CHE*H121 General Chemistry I	4
Program Requirement	Directed elective ^{††}	3
FOURTH SEMESTER		
Aesthetic Dimensions/Written Communication	Fine arts course ^{†††}	3
Social Phenomena	PSY*H111 General Psychology I or SOC*H101 Principles of Sociology	3
Program Requirement	ECN*H102 Principles of Microeconomics	3
Program Requirement	Directed elective ^{††}	3-4
Program Requirement	Directed elective ^{††}	3-4
Program Requirement	MAT*H167 Principles of Statistics	3
[‡] MAT*H172 College Algebra must be taken if student does not place into MAT*H185 Trigonometric Functions		
^{††} Choose from BIO*H121, H122 or H235; BMG*H202; BMK*H201; any CAD*; any CHE*; any EET*; any EGR*; MAT*H172 or higher; any MEC*; any MFG*; any PHY*; any TCN*		
^{†††} Choose from ART*H101 or H102; DAN*H101; MUS*H101; THR*H101		

Program Outcomes

Upon successful completion of all program requirements, graduates will be able to:

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.

Total Credits: 65-68

TECHNOLOGY STUDIES**College of Technology Pathway Program****Engineering Technology Option**

The Connecticut College of Technology Pathways program allows students to complete an associate in science degree program in Technology Studies and continue on to complete a bachelor of science degree in Mechanical Engineering Technology or Manufacturing Engineering Technology at Central Connecticut State University's School of Engineering Science and Technology. The curriculum offers a broad range of studies and topics in: mathematics, physics, chemistry, engineering drawing and computer-aided design (CAD), mechanical engineering technologies, and manufacturing engineering technologies. The program also includes a solid core of courses in general education. Successful completion of the program allows students to enter their junior year at Central Connecticut State University. Consultation with a faculty advisor is strongly recommended.

Additional courses may be required. Note: To complete the degree in two years, students are advised to complete the courses in the sequence listed beginning in the fall semester.

Competency or Program Requirement	Course Number and Title	Required Credits
FIRST SEMESTER		
Critical Analysis and Logical Thinking/ Written Communication	ENG*H101 Composition	3
Scientific Reasoning ^o	PHY*H121 General Physics I or PHY*H221 Calculus-based Physics I	4
Quantitative Reasoning	MAT*H185 Trigonometric Functions or higher	3-4
Program Requirement	TCN*H101 Introduction to Engineering Technology	3
Program Requirement	MFG*H104 Manufacturing Processes	4
SECOND SEMESTER		
Written Communication	ENG*H202 Technical Writing	3
Program Requirement	CAD* course	3
Program Requirement	MAT*H254 Calculus I	4
Program Requirement	PHY*H122 General Physics II or PHY*H222 Calculus-based Physics II	4
Program Requirement	PHL* course	3
THIRD SEMESTER		
Oral Communication	COM*H173 Public Speaking	3
Historical Knowledge and Understanding	HIS*H101 Western Civ. I, HIS*H102 Western Civ. II, HIS*H201 U.S. History I or HIS*H202 Landscape Design I	3
Scientific Knowledge and Understanding ^o	CHE*H121 General Chemistry I	4
Program Requirement	MEC*H114 Statics	3
Program Requirement	MAT*H256 Calculus II	4
FOURTH SEMESTER		
Aesthetic Dimensions/Written Communication	Fine arts course [†]	3
Continuous Learning/Information Literacy and Ethical Dimensions	ECN*H101 Principles of Macroeconomics	3
Social Phenomena	PSY*H111 or SOC*H101	3
Program Requirement	MEC*H238 Dynamics	4
Program Requirement	MAT*H167 Principles of Statistics	3
^o Choose from ART*H101 or H102; DAN*H101; MUS*H101; THR*H101		

Total Credits: 67-68

[†]Choose from:

ART*H101
ART*H102
DAN*H101
MUS*H101
THR*H101

Program Outcomes

Upon successful completion of all program requirements, graduates will be able to:

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.
4. Ability to design and conduct experiments, and to analyze and interpret data.
5. Understand and perform the common manufacturing processes in the industry.
6. Ability to function effectively on teams and within a diverse environment.

TECHNOLOGY STUDIES**College of Technology Pathway Program****Lean Manufacturing and Supply Chain Management Option**

The Connecticut College of Technology Pathways program allows students to complete an associate in science degree program in Technology Studies and continue on to complete a bachelor of science degree in Industrial Technology with a focus in Technology Management at Central Connecticut State University's School of Engineering Science and Technology. The curriculum offers a broad range of studies and topics in: mathematics, physics, chemistry, engineering drawing and computer-aided design (CAD), computer-aided manufacturing (CAM), electronic engineering technologies, mechanical engineering technologies, machine technologies, and other courses in special areas of technology. The program also includes a solid core of courses in general education. Successful completion of the program allows students to enter their junior year at Central Connecticut State University.

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 a faculty advisor is strongly recommended.

Placement testing will determine the sequencing of courses. Additional courses may be required. Note: To complete the degree in two years, students are advised to complete the courses in the sequence listed beginning in the fall semester.

Competency or Program Requirement	Course Number and Title	Required Credits
FIRST SEMESTER		
Critical Analysis and Logical Thinking/ Written Communication	ENG*H101 Composition	3
Scientific Reasoning ^o	PHY*H110 Introduction to Physics or PHY*H121 General Physics I	4
Program Requirement	MAT*H167 Principles of Statistics	3
Program Requirement	Directed elective ^{†, ††}	3
Program Requirement	MFG*H171 Introduction to Lean Manufacturing ^{†††}	3
SECOND SEMESTER		
Quantitative Reasoning	MAT*H185 Trigonometric Functions or higher level math course [†]	3-4
Written Communication	ENG*H202 Technical Writing	3
Program Requirement	CAD* course	3
Program Requirement	Directed Elective ^{††}	3-4
Program Requirement	MFG*H271 Advanced Lean Manufacturing ^{†††}	3
THIRD SEMESTER		
Continuing Learning/Information Literacy and Ethical Dimensions	ECN*H101 Principles of Macroeconomics	3
Historical Knowledge and Understanding	HIS*H101 Western Civilization I or HIS*H102 Western Civilization II or HIS*H201 U.S. History I or HIS*H202 U.S. History II	3
Program Requirement	Directed Elective ^{††}	3-4
Scientific Knowledge and Understanding ^o	CHE*H111 Concepts of Chemistry or CHE*H121 General Chemistry I	4
Program Requirement	MFG*H172 Introduction to Lean Supply Chain Management ^{†††}	3
FOURTH SEMESTER		
Aesthetic Dimensions/Written Communication	Fine arts course ^{††††}	3
Social Phenomena	PSY*H111 or SOC*H101	3
Oral Communication	COM*H173 Public Speaking	3
Program Requirement	ECN*H102 Principles of Microeconomics	3
Program Requirement	MFG*H272 Implementing Lean Supply Chain Management ^{†††}	3
Program Requirement	PHL*Course	3-4

Total Credits: 65-68

[†]MAT*H172 College Algebra must be taken if student does not place into MAT*H185 Trigonometric Functions

^{††}Choose from BIO*H121, H122 or H235; BMG*H202; BMK*H201; any CAD*; any CHE*; any EET*; any EGR*; MAT*H172 or higher; any MEC*; any MFG*; any PHY*; any TCN*

^{†††}MFG*H171-271 and MFG*H172-272 are offered every other year, advise to enroll in whichever is offered

^{††††}Choose from ART*H101 or H102; DAN*H101; MUS*H101; THR*H101

Program Objectives

Upon successful completion of all program requirements, graduates will be able to:

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.
4. Apply principles in lean manufacturing and supply chain management to eliminate waste in processes and protocols.

VISUAL AND PERFORMING ARTS

Visual Arts Option

The **Visual Arts Option** provides training in art history, traditional two-dimensional methodologies (painting, drawing, design), three-dimensional formats (sculpture and pottery), and computerized graphic design. Students will be qualified to seek positions in galleries, museums, and theater productions.

General Education Core course listings and definitions appear on pages 53-54. Placement testing will determine the sequencing of courses. Additional courses may be required.

Competency or Program Requirement	Course Number and Title	Required Credits
Aesthetic Dimensions/Written Communication	ART*H101 Art History I	3
Continuing Learning and Information Literacy/Ethics	Choose any Continuing Learning and Information Literacy/Ethics listed - Prefer DAT*H101 Introduction to Digital Arts	3
Critical Analysis and Logical Thinking/Written Communication	ENG*H101 Composition	3
Historical Knowledge	Choose any Historical Knowledge listed	3
Oral Communication	Choose any Oral Communication listed - Prefer COM*H100 Introduction to Communications	3
Quantitative Reasoning [◊]	MAT*H135 [†] Topics in Contemporary Mathematics or any Quantitative Reasoning course higher than MAT*H137 Intermediate Algebra	3
Scientific Knowledge ^{◊◊}	Choose any Scientific Knowledge listed - Prefer BIO*H105 Introduction to Biology ^{††}	3-4
Scientific Reasoning ^{◊◊}	Choose any Scientific Reasoning listed - Prefer DAN*H175 Kinesiology for Dancers ^{††}	3-4
Social Phenomena	Choose any Social Phenomena listed - Prefer ANT*H101 Introduction to Anthropology or PSY*H111 General Psychology I or SOC*H101 Principles of Sociology	3
Written Communication	Any listed - Prefer ENG*H102 Literature and Composition	3
Program Requirements	ART*H102 Art History II	3
	ART*H111 Drawing I	3
	ART*H112 Drawing II	3
	ART*H121 Two-Dimensional Design	3
	ART*H122 Three - Dimensional Design	3
	ART*H131 Sculpture I	3
	ART*H151 Painting I	3
	ART*H161 Ceramics I	3
	ART*H167 Printmaking I	3
	Any from the following Electives: ART*H132 Sculpture II ART*H152 Painting II ART*H162 Ceramics II GRA*H150 Introduction to Graphic Design	3

Total Credits: 61-62

Any given course may only be used to satisfy one of the competency areas even if it is listed under more than one.

[†]Mathematics selection is MAT*H135 for AA degree students. MAT*H167 or MAT*H172 is for students intending to transfer to a four year degree program.

^{††}Science selection from any 3 credit science course for AA degree students, or any 4 credit science course (with lab) for students transferring to any CSU or UConn.

[◊] MAT*H137 and courses numbered lower than MAT*H137 will not transfer to Connecticut State Universities as Quantitative Reasoning courses.

^{◊◊} At least one Scientific Knowledge and Understanding OR Scientific Reasoning course must have a lab component.

Program Objectives

Upon successful completion of all program requirements, graduates will be able to:

1. Execute skills and techniques necessary for studio art, and demonstrate manipulative skills including dexterity with tools and equipment specific to various media.
2. Compile a portfolio of work reflecting the breadth of his/her study.
3. Demonstrate desirable attitudes and work habits — creative thinking, the ability to solve problems, good artistic judgment, industriousness, cooperation, responsibility, and self-reliance.
4. Describe a knowledge of the relationship among various components of art including design, drawing and painting, and understand the contributions that each makes to the final product.
5. Demonstrate an understanding of the process of mounting an exhibition of work and presenting it to the public.
6. Communicate clearly using specific art vocabulary

Visual and Performing Arts Electives

ART*H122 Three-Dimensional Design
 ART*H131 Sculpture I
 ART*H132 Sculpture II
 ART*H160 Crafts
 ART*H161 Ceramics I
 ART*H162 Ceramics II
 ART*H167 Printmaking I
 DAN*H102 Ballet I: Renaissance to Romantic
 DAN*H111 Jazz Dance I: Afro-Caribbean/
 American
 DAN*H112 Jazz Dance II: Broadway & Film
 DAN*H113 Modern Dance I: Pioneers of America
 DAT*H106 Digital Design
 DAT*H116 Interactive Media Design
 DAT*H212 3D Graphics and Animation I
 DAT*H290 Digital Arts Project
 GRA*H150 Introduction to Graphic Design
 MUS*H111 Fundamentals of Music I
 MUS*H115 Music Theory I
 MUS*H116 Music Theory II
 MUS*H153 Class Instruction Piano
 MUS*H161 Chorale
 MUS*H173 Class Voice
 MUS*H183 Applied Lessons
 MUS*H184 Applied Lessons
 MUS*H208 Introduction to Music Therapy
 MUS*H254 Concert Band
 MUS*H218 Electronic Music Composition/
 Audio Technology I
 MUS*H163 Ear Training I
 MUS*H164 Ear Training II
 THR*H110 Acting I
 THR*H120 Stagecraft
 THR*H190 Theater Practicum I

VISUAL AND PERFORMING ARTS

Dance Option

The **Dance Option** provides students with a broad base of cultural and historical knowledge as well as technique, pedagogy and repertoire in the various dance genres. The creative process is fostered by inclusion of production skills, the art of choreography, and performance opportunities. This foundation will prepare students to further their study, teach, choreograph, and/or perform. Graduates may seek employment in dance education, dance studios, community service organizations, and as production assistants, choreographers, teacher assistants, dance therapy assistants, and as dancers in the arts and entertainment industry. Students must be physically able to participate in studio courses. As of 2006, CT's State Board of Education requires public school K-12 dance certification for dance teachers. The Dance Option provides the required dance courses for this education certification. The Transfer Program articulated with Central Connecticut State University guarantees acceptance of major dance credits.

General Education Core course listings and definitions appear on pages 53-54. Placement testing will determine the sequencing of courses. Additional courses may be required.

Competency or Program Requirement	Course Number and Title	Required Credits
Aesthetic Dimensions/Written Communication	DAN H101 History and Appreciation of World Dance	3
Continuing Learning and Information Literacy/Ethics	Choose any listed - Prefer DAT*H101 Introduction to Digital Arts	3
Critical Analysis and Logical Thinking/ Written Communication	ENG*H101 Composition	3
Historical Knowledge	HIS*H101 Western Civilization	3
Oral Communication	Choose any listed - Prefer COM*H100 Introduction to Communications	3
Quantitative Reasoning ^o	MAT*H135 Topics in Contemporary Mathematics or any Quantitative Reasoning course higher than MAT*H137 Intermediate Algebra	3
Scientific Knowledge ^{oo}	Choose any listed - Prefer BIO*H105 Introduction to Biology	3-4
Scientific Reasoning ^{oo}	Choose any listed - Prefer DAN*H175 Kinesiology for Dancers	3-4
Social Phenomena	Choose any listed - Prefer ANT*H101 Introduction to Anthropology or PSY*H111 General Psychology I or SOC*H101 Principles of Sociology	3
Written Communication	Choose any listed - Prefer ENG*H102 Literature and Composition	3
Program Requirements	DAN*H102 Ballet I: Renaissance to Romantic	3
	DAN*H202 Ballet II: Classical to Contemporary	3
	DAN*H113 Modern I: Pioneers of American Modern Dance	3
	DAN*H213 Modern II: Second Generation of American Modern Dance	3
	DAN*H111 Jazz I: Afro-Caribbean American Vernacular	3
	DAN*H112 Jazz II: Broadway and Film Dance	3
	DAN*H221 Repertory/Ensemble I	3
	DAN*H222 Choreographic Principles/Ensemble I	3
	DAN*H118 Dance Pedagogy: Early Childhood Education	1
	DAN*H232/233 Ballet III, Modern III	2
Additional Dance Courses Available DAN*H109, 209, 188, 119, 120, 140, 224, 225, 231 Total Credits: 61-62 <i>Any given course may only be used to satisfy one of the competency areas even if it is listed under more than one.</i>	Elective See List (DAN) Dance Recommended	3

Program Objectives

Upon successful completion of all program requirements, graduates will be able to:

1. Demonstrate and execute warm-up exercises specific to all dance forms (ballet, modern, ethnic, jazz).
2. Execute desirable physical activity, preparation, and training for the dancer, actor, or musician so that she/he may intelligently choose a further course of action in the arts.
3. Execute a variety of choreographic styles to enhance and broaden movement and choreographic vocabulary utilizing time, space and energy.
4. Demonstrate kinesthetic awareness, mental and physical coordination, rhythmic sensitivity, and musicality.
5. Identify dancers and choreographers and their particular contributions to the field of dance and their processes in creating dance.
6. Choreograph and perform movement and demonstrate performance skills of concentration, projection, characterization, expression and ensemble work.
7. Demonstrate wherewithal for scheduling and conducting rehearsals and producing a performance that includes staging, lighting, costuming, decor, and publicity.

Visual and Performing Arts Electives

- ART*H101 Art History I
- ART*H102 Art History II
- ART*H160 Crafts
- ART*H122 Three-Dimensional Design
- ART*H131 Sculpture I
- ART*H132 Sculpture II
- ART*H141 Photography I
- ART*H142 Photography III
- ART*H161 Ceramics I
- ART*H162 Ceramics II
- ART*H167 Printmaking I
- COM*H175 Voice and Diction
- DAN*H109 Ballroom Dancing
- DAN*H110 Rhythm Tap
- DAN*H118 Dance Pedagogy for Early Childhood
- DAN*H119 Dance Pedagogy for Elementary Education
- DAN*H120 Dance Pedagogy for Secondary Education
- DAN*H140 Pilates/Wellness
- DAN*H175 Kinesiology for Dancers
- DAN*H231 Jazz III: Musical Theater Dance
- DAN*H225 Repertory/Ensemble II
- DAN*H224 Choreographic Principles/Ensemble II
- DAT*H106 Digital Design
- DAT*H116 Interactive Media Design
- DAT*H212 3D Graphics and Animation I
- DAT*H290 Digital Arts Project
- GRA*H150 Introduction to Graphic Design
- MUS*H111 Fundamentals of Music I
- MUS*H158 Chamber Music/Jazz Ensemble I
- MUS*H163 Ear Training I
- MUS*H164 Ear Training II
- MUS*H176 Gospel Choir
- MUS*H179 Opera Performance Ensemble
- MUS*H184 Applied Private Music Lessons & MUS*H183
- MUS*H206 Introduction to Music Education
- MUS*H208 Introduction to Music Therapy
- MUS*H213 Music Theory III
- MUS*H214 Music Theory IV
- MUS*H254 Concert Band
- MUS*H218 Electronic Music Composition/Audio Technology I
- THR*H110 Acting I
- THR*H120 Stagecraft
- THR*H190 Theater Practicum I

Associate Degree Programs

^oMAT*H137 and courses numbered lower than MAT*H137 will not transfer to Connecticut State Universities as Quantitative Reasoning courses.

^{oo}At least one Scientific Knowledge and Understanding OR Scientific Reasoning course must have a lab component.

[†]Students intending to transfer are encouraged to take MAT 146, 167, or 172; students planning to major in Education should take MAT 143 or 144.

^{**}BIO*H115 Human Biology is strongly recommended for students who are planning on transferring and pursuing their 4-year degree. DAN*H175 Kinesiology for Dancers is required for state certification in K-12 dance education and fulfills the science requirement for dance majors.

VISUAL AND PERFORMING ARTS

Digital Design Option

The *Digital Design Option* provides students with an in-depth understanding of two-dimensional digital design, three-dimensional object modeling and animation, and sound design. Required courses focus on the detailed study of 3D modeling and animation, digital photography and video production, digital audio and sound design, and Web design and development. Topics are explored from both a theoretical and applications perspective. The program mission is to prepare digital designers for jobs in marketing, video production, music and sound production, graphic art production, and electronic publishing.

General Education Core course listings and definitions appear on pages 53-54. Placement testing will determine the sequencing of courses. Additional courses may be required.

Course Type	Course Number & Title	Cr.	Program Objectives
Core Communications	COM*H100 Introduction to Communications	3	<p><i>Upon successful completion of all program requirements graduates will be able to:</i></p> <ol style="list-style-type: none"> 1. Design and edit digital graphic and image files. 2. Utilize techniques for 3D character modeling and the design of 3D virtual space. 3. Analyze and evaluate the properties of sound, human hearing, psychoacoustics, electro-acoustic and digital sound reproduction systems. 4. Design state-of-the-art special effect techniques for film and video. 5. Design and edit digital audio for multimedia, video, games, and the web. 6. Plan, produce, script, edit, and complete original video projects.
Core Communications	ENG*H101 Composition	3	
Core Humanities	ENG*H102 Literature and Composition <i>or</i> ENG*H200 Advanced Composition	3	
Core Mathematics	MAT*H135 Topics in Contemporary Mathematics <i>or</i> any Mathematics course higher than MAT*H137 [†]	3	
Core Science	Any Science (AST, BIO, CHE, GLG, MET or PHY) course (except BIO*H111)	3-4	
Core Behavioral Science	ANT*H101 Introduction to Anthropology <i>or</i> PSY*H111 General Psychology I <i>or</i> SOC*H101 Principles of Sociology	3	
Core Social Science	HIS*H101 Western Civilization I <i>or</i> HIS*H102 Western Civilization II <i>or</i> HIS*H201 U.S. History I <i>or</i> HIS*H202 U.S. History II	3	
Core Liberal Arts and Behavioral/Social Sciences	ART*H101 Art History <i>or</i> 3 ART*H102 Art History II		
Program Arts	DAN*H101 History and Appreciation of World Dance	3	
Program Arts	DAT*H101 Introduction to Digital Arts	3	
Program Arts	MUS*H101 History & Appreciation of Music	3	
Program Arts	THR*H101 Introduction to Theater	3	
Program Arts	Visual and Performing Arts Electives <i>(students should choose 9 credits from courses listed on this page)</i>	9	
Program Requirement	DAT*H106 Digital Publishing	3	
Program Requirement	DAT*H108 Digital Imaging I	3	
Program Requirement	DAT*H110 Digital Video Production I	3	
Program Requirement	DAT*H212 3D Graphics & Animation	3	
Program Requirement	DAT*H220 Acoustics & Sound Design	3	
Program Business	CSA*H105 Introduction to Software Applications	3	
Total Credits:		63-64	<p><i>Visual and Performing Arts Electives</i></p> <p>ART*H101 Art History I ART*H102 Art History II ART*H122 Three-Dimensional Design ART*H131 Sculpture I ART*H132 Sculpture II ART*H141 Photography I ART*H142 Photography II ART*H160 Crafts ART*H161 Ceramics I ART*H162 Ceramics II ART*H167 Printmaking I COM*H175 Voice and Diction DAN*H102 Ballet I: Renaissance to Romantic DAN*H111 Jazz Dance I: Afro-Caribbean/ American DAN*H112 Jazz Dance II: Broadway & Film DAN*H113 Modern Dance I: Pioneers of America DAT*H106 Digital Design DAT*H116 Interactive Media Design DAT*H212 3D Graphics and Animation I DAT*H290 Digital Arts Project GRA*H150 Introduction to Graphic Design MUS*H103 History of American Music MUS*H104 World Music MUS*H111 Fundamentals of Music I MUS*H153 Class Instruction Piano MUS*H158 Chamber Music/Jazz Ensemble MUS*H163 Ear Training I MUS*H164 Ear Training II MUS*H176 Gospel Choir MUS*H179 Opera Performance Ensemble MUS*H184 Applied Private Music Lessons MUS*H206 Introduction to Music Education MUS*H208 Introduction to Music Therapy MUS*H213 Music Theory III MUS*H214 Music Theory IV MUS*H254 Concert Band MUS*H218 Electronic Music Composition/Audio Technology I THR*H110 Acting I THR*H120 Stagecraft THR*H190 Theater Practicum I</p>

[†]Students intending to transfer are encouraged to take MAT 146, 167, or 172

VISUAL AND PERFORMING ARTS

Music Option

The **Music Option**, through a rigorous program of academic and performance courses, provides a comprehensive foundation in which students receive individual attention within their private lessons and interact with other performers in classroom and large ensemble settings. The music program emphasizes ensemble and solo performance with additional study of music theory and history. Musicians of all capabilities and experience can prepare for their particular musical goals including seasoned musicians as well as the talented beginner exploring music for the first time. Music majors pursue careers in performance, education, composition, audio recording, concert sound reinforcement, commercial production, church music, musical instrument service and sales, or arts management. The Transfer Program is designed for students wishing to complete their degree at a 4-year college or university; requirements vary and students should seek assistance from the Music Advisor. The Transfer Program articulated with Western CT State University guarantees admission with complete transfer of NVCC courses. See the Music Advisor for details.

General Education Core course listings and definitions appear on pages 53-54. Placement testing will determine the sequencing of courses. Additional courses may be required.

Competency or Program Requirement	Course Number and Title	Required Credits
Aesthetic Dimensions/Written Communication	MUS 101 Music History & Appreciation I	3
Continuing Learning and Information Literacy/Ethics	Choose any Continuing Learning and Information Literacy/Ethics listed—Prefer DAT 101 Introduction to Digital Arts	3
Critical Analysis and Logical Thinking/Written Communication	ENG 101 Composition	3
Historical Knowledge	Choose any Historical Knowledge Listed	3
Oral Communication	Choose any Oral Communication listed Prefer--COM 100 Introduction to Communications	3
Quantitative Reasoning ^o	MAT 135 [†] or any Quantitative Reasoning course higher than MAT*H137*	3
Scientific Knowledge ^{oo}	Choose any Scientific Knowledge listed Prefer BIO 105** Introduction to Biology	3-4
Scientific Reasoning ^{oo}	Choose any Scientific Reasoning listed Prefer DAN*H175** Kinesiology for Dancers	3-4
Social Phenomena	Choose any Social Phenomena listed Prefer ANT*H101 Introduction to Anthropology or PSY*H111 General Psychology I or SOC*H101 Principles of Sociology	3
Written Communication	Choose any Written Communication listed Prefer ENG 102 Literature and Composition	3
Program Requirements	MUS*H115 Music Theory I	3
	MUS*H163 Ear Training I	1
	MUS*H116 Music Theory II	3
	MUS*H164 Ear Training II	1
	MUS*H213 Music Theory III	3
	MUS*H263 Ear Training III	1
	MUS*H214 Music Theory IV	3
	MUS*H264 Ear Training IV	1
	MUS*H183 Private Music Lessons I	2
	MUS*H184 Private Music Lessons II	4
MUS*H161, 254, or 158	8	

[†]Mathematics selection is MAT*H135 for AA degree students. MAT*H167 or MAT*H172 is for students intending to transfer to a four year degree program.

- Applied Lessons selection for AA degree students is one semester each of MUS*H183 and MUS*H184, while students transferring to any CSU or UConn take two semesters each of MUS*H183 and MUS*H184. The particular field for the Applied Lessons is determined by the student's performance major and audition as directed by the Department Chair.
- The particular Music Ensemble (MUS*H161 Chorale, MUS*H158 Chamber Music Jazz Ensemble, MUS*H254 Concert Band) is determined by student's performance major and audition as directed by Department Chair. Performance Ensemble Requirement for AA degree students is two semesters of performance ensemble, while students transferring to any CSU or UConn take four semesters of performance ensemble.

^o MAT*H137 and courses numbered lower than MAT*H137 will not transfer to Connecticut State Universities as Quantitative Reasoning courses.

^{oo} At least one Scientific Knowledge and Understanding OR Scientific Reasoning course must have a lab component.

Program Objectives

Upon successful completion of all program requirements, graduates will be able to:

1. Relate basic musical forms and theoretical principles to performance.
2. Demonstrate technical skills in singing and/or in playing an instrument or instruments.
3. Demonstrate historical knowledge of musical events, styles, forms and concepts.
4. Demonstrate a knowledge of musical literature in the area of the student's major.
5. Demonstrate performance skills via ensemble experience.
6. Develop an appreciation of world culture through the beauty and discipline of the Art of music.

Visual and Performing Arts Electives

- ART*H160 Crafts
- ART*H122 Three-Dimensional Design
- ART*H131 Sculpture I
- ART*H132 Sculpture II
- ART*H141 Photography I
- ART*H142 Photography II
- ART*H161 Ceramics I
- ART*H162 Ceramics II
- ART*H167 Printmaking I
- DAN*H102 Ballet I: Renaissance to Romantic
- DAN*H111 Jazz Dance I: Afro-Caribbean/American
- DAN*H112 Jazz Dance II: Broadway & Film
- DAN*H113 Modern Dance I: Pioneers of America
- DAT*H106 Digital Design
- DAT*H116 Interactive Media Design
- DAT*H212 3D Graphics and Animation I
- DAT*H290 Digital Arts Project
- GRA*H150 Introduction to Graphic Design
- MUS*H111 Fundamentals of Music I
- MUS*H153 Class Instruction Piano
- MUS*H173 Class Voice
- MUS*H179 Opera Performance Ensemble
- MUS*H184 Applied Private Music Lessons
- MUS*H208 Introduction to Music Therapy
- MUS*H213 Music Theory III
- MUS*H214 Music Theory IV
- MUS*H254 Concert Band
- MUS*H218 Electronic Music Composition/Audio Tech. I
- MUS*H219 Electronic Music Composition/Audio Tech. I
- MUS*H263 Ear Training III
- MUS*H264 Ear Training IV
- THR*H110 Acting I
- THR*H120 Stagecraft
- THR*H190 Theater Practicum I

Total Credits: 60-61

Any given course may only be used to satisfy one of the competency areas even if it is listed under more than one.

Associate Degree Programs

VISUAL AND PERFORMING ARTS

Theater Arts Option

The *Theater Arts Option* offers a challenging course of study for both the novice student and experienced theater artist. Through a combination of classroom training, production experience opportunities, and community service outreach, NVCC theater students develop a definite set of skills, knowledge, and values that lead to growth as individuals, artists, and future theater professionals. Ultimately, the NVCC theater program strives to develop the creative and intellectual potential in both arts and non-arts majors at the college. Graduate employment may include assistantships as directors, stage managers, theater technicians, box office managers, marketing coordinators, sound engineers, lighting assistants, or acting interns.

General Education Core course listings and definitions appear on pages 53-54. Placement testing will determine the sequencing of courses. Additional courses may be required.

Competency or Program Requirement	Course Number and Title	Required Credits
Aesthetic Dimensions/Written Communication	THR*H101 Introduction to Theater	3
Continuing Learning and Information Literacy/Ethics	Any Listed - Prefer DAT*H101 Introduction to Digital Arts	3
Critical Analysis and Logical Thinking/Written Communication	ENG*H101 Composition	3
Historical Knowledge	Any listed	3
Oral Communication	Any listed - Prefer COM*H100 Introduction to Communications	3
Quantitative Reasoning [◊]	MAT*H135 [†] Topics in Contemporary Mathematics or any Quantitative Reasoning course higher than MAT*H137 Intermediate Algebra	3
Scientific Knowledge ^{◊◊}	Any listed - Prefer BIO*H105 Introduction to Biology ^{††}	3-4
Scientific Reasoning ^{◊◊}	Any listed - Prefer DAN*H175 Kinesiology for Dancers ^{††}	3-4
Social Phenomena	Any listed - Prefer ANT*H101 Introduction to Anthropology or PSY*H111 General Psychology I or SOC*H101 Principles of Sociology	3
Written Communication	Any listed - Prefer ENG*H102 Literature and Composition	3
Program Requirements	ART*H101 or ART*H102 or ART*H111 or ART*H121	3
	DAN*H101 or DAN*H113 or DAN*H102 or DAN*H111	3
	MUS*H101 or MUS*H111 or MUS*H173 or MUS*H183 or MUS*H184	3
	THR 110 Acting I	3
	THR 210 Acting II	3
	THR 120 Stagecraft	3
	THR 190 Theater Practicum I	3
	THR 290 Theater Practicum II	3
	Any Visual and Performing Arts Electives listed in catalog	6

Total Credits: 61-62

Any given course may only be used to satisfy one of the competency areas even if it is listed under more than one.

[†]Mathematics selection is MAT*H135 for AA degree students. MAT*H167 or MAT*H172 is for students intending to transfer to a four year degree program.

^{††}Science selection from any 3-credit science course for AA degree students, or any 4 credit science course (with lab) for students transferring to any CSU or UConn.

[◊] MAT*H137 and courses numbered lower than MAT*H137 will not transfer to Connecticut State Universities as Quantitative Reasoning courses.

^{◊◊} At least one Scientific Knowledge and Understanding OR Scientific Reasoning course must have a lab component.

Program Objectives

Upon successful completion of all program requirements, graduates will be able to:

1. Demonstrate knowledge of historical events in film and theater.
2. Demonstrate the art of stage technology, costuming, set construction, and lighting.
3. Demonstrate specific performance skills in acting, including character analysis, blocking, interpretation, voice and diction.
4. Master the art of theatrical auditioning.
5. Develop a repertory of theatrical roles through participation in plays and theater events.
6. Develop an appreciation of world culture through the beauty and discipline of the art of theater.

Visual and Performing Arts Electives

- ART*H122 Three-Dimensional Design
- ART*H131 Sculpture I
- ART*H132 Sculpture II
- ART*H141 Photography I
- ART*H142 Photography II
- ART*H160 Crafts
- ART*H161 Ceramics I
- ART*H162 Ceramics II
- ART*H167 Printmaking I
- DAN*H102 Ballet I: Renaissance to Romantic
- DAN*H111 Jazz Dance I: Afro-Caribbean/American
- DAN*H112 Jazz Dance II: Broadway & Film
- DAN*H113 Modern Dance I: Pioneers of America
- DAT*H106 Digital Design
- DAT*H116 Interactive Media Design
- DAT*H212 3D Graphics and Animation I
- DAT*H290 Digital Arts Project
- GRA*H150 Introduction to Graphic Design
- MUS*H111 Fundamentals of Music I
- MUS*H115 Music Theory I
- MUS*H116 Music Theory II
- MUS*H153 Class Instruction Piano
- MUS*H161 Chorale
- MUS*H173 Class Voice
- MUS*H183 Applied Lessons
- MUS*H184 Applied Lessons
- MUS*H208 Introduction to Music Therapy
- MUS*H254 Concert Band
- MUS*H218 Electronic Music Composition/Audio Technology I
- MUS*H163 Ear Training I
- MUS*H164 Ear Training II
- THR*H225 Directing
- THR*H226 Musical Theater Production
- THR*H231 Dramatic Literature
- THR*H295 Theater Practicum III



CONNECTICUT STATE COLLEGES AND UNIVERSITIES (CSCU) TRANSFER TICKET DEGREES

Connecticut State Colleges and Universities (CSCU) Transfer Ticket Degrees

CSCU's Transfer Tickets are new degree programs providing pathways for community college students to complete degree programs that transfer to Connecticut State Universities (Central, Eastern, Southern, and Western) and Charter Oak State College without losing any credits or being required to take extra credits in order to complete a bachelor's degree in that same discipline. You will be able to transfer, apply to competitive admissions majors, and complete your BA/BS degree in the same time and with the same course requirements as students who start at a CSU or COSC.

The Transfer Tickets taking effect in the Fall 2016 are

- Biology Studies
- Chemistry Studies
- Communication Studies
- Criminology Studies
- English Studies
- History Studies
- Mathematics Studies
- Political Science Studies
- Psychology Studies
- Social Work Studies
- Sociology Studies

Please visit www.ct.edu/transfer for details.

General education core course listings and definitions appear on pages 53 and 54. Placement testing will determine the sequencing of courses. Additional courses may be required.

CSCU Pathway Transfer A.A./A.S. Degree

BIOLOGY STUDIES

General education core course listings and definitions appear on pages 53 and 54. Placement testing will determine the sequencing of courses. Additional courses may be required.

Competency or Program Requirement	Course Number and Title	Required Credits
FIRST SEMESTER		
Critical Analysis and Logical Thinking/ Written Communication	ENG*H101 Composition	3
Quantitative Reasoning	MAT*H185 Trigonometric Functions or MAT*H186 Precalculus	3-4
Scientific Knowledge	CHE*H121 General Chemistry I	4
Scientific Reasoning	BIO*H121 General Biology I	4
SECOND SEMESTER		
Written Communication	Choose any Written Communication listed	3
Program Requirement	BIO*H122 General Biology II	4
Program Requirement	CHE*H122 General Chemistry II	4
Program Requirement	MAT*H254 Calculus I	4
THIRD SEMESTER		
Aesthetic Dimensions/Written Communications	Choose any Aesthetic Dimensions/ Written Communications listed	3
Oral Communication	Choose any Oral Communication course listed	3
Program Requirement	Any *H200 level BIO science lab	4
Program Requirement	PHY*H121 General Physics I or CHE*H211 Organic Chemistry I	4
FOURTH SEMESTER		
Continuing Learning and Information Literacy/Ethics	Choose any Continuing Learning and Information Literacy/Ethics listed	3
Historical Knowledge	Choose any Historical Knowledge listed	3
Social Phenomena	Choose any Social Phenomena listed	3
Program Requirement	Choose any *H200 level BIO science lab	4
Program Requirement	PHY*H122 General Physics II or CHE*H212 Organic Chemistry II	4

Total Credits: 60-61

Any given course may only be used to satisfy one of the competency areas even if it is listed under more than one.

CHEMISTRY

General education core course listings and definitions appear on pages 53 and 54. Placement testing will determine the sequencing of courses. Additional courses may be required.

Competency or Program Requirement	Course Number and Title	Required Credits
FIRST SEMESTER		
Continuing Learning and Information Literacy/Ethics	Choose any Continuing Learning and Information Literacy/Ethics listed	3
Critical Analysis and Logical Thinking/ Written Communication	ENG*H101 Composition	3
Quantitative Reasoning	MAT*H254 Calculus I	4
Scientific Knowledge	CHE*H121 General Chemistry I	4
Program Requirement	General Elective ^o - Choose any credit course	3
SECOND SEMESTER		
Oral Communication	Choose any Oral Communication course listed	3
Scientific Reasoning	CHE*H122 General Chemistry II	4
Social Phenomena	Choose any Social Phenomena listed	3
Written Communication	Choose any Written Communication listed	3
Program Requirement	MAT*H256 Calculus II	4
THIRD SEMESTER		
Aesthetic Dimensions/Written Communications	Choose any Aesthetic Dimensions/ Written Communications listed	3
Program Requirement	CHE*H211 Organic Chemistry I	4
Program Requirement	PHY*H121 General Physics I or PHY*H221 ^o Calculus Based Physics I	4
Program Requirement	General Elective ^o - Choose any credit course	3
FOURTH SEMESTER		
Historical Knowledge	Choose any Historical Knowledge listed	3
Program Requirement	CHE*H212 Organic Chemistry II	4
Program Requirement	PHY*H122 General Physics II or PHY*H222 ^o Calculus Based Physics II	4
Program Requirement	General Elective ^o - Choose any credit course	3

Total Credits: 62

Any given course may only be used to satisfy one of the competency areas even if it is listed under more than one.

^o PHY*H221 and H222 Calculus-Based Physics must be taken for the American Chemical Society approved Bachelor's degree.

^oIf student is not MAT*H254 Calculus I-ready, use general electives for courses such as MAT*H137 Intermediate Algebra, MAT*H172 College Algebra and MAT*H185 Trigonometric Functions, or MAT*H186 Precalculus.

COMMUNICATION STUDIES

General education core course listings and definitions appear on pages 53 and 54. Placement testing will determine the sequencing of courses. Additional courses may be required.

Competency or Program Requirement	Course Number and Title	Required Credits
Aesthetic Dimensions/Written Communications	Choose any Aesthetic Dimensions/Written Communications listed	3
Continuing Learning and Information Literacy/Ethics	Choose any Continuing Learning and Information Literacy/Ethics listed	3
Critical Analysis and Logical Thinking/Written Communication	ENG*H101 Composition	3
Historical Knowledge	Choose any Historical Knowledge listed	3
Oral Communication	Choose any Oral Communication course listed	3
Quantitative Reasoning ^o	Choose any Quantitative Reasoning listed	3
Scientific Knowledge ^{oo}	Choose any Scientific Knowledge listed	3-4
Scientific Reasoning ^{oo}	Choose any Scientific Reasoning listed	3-4
Social Phenomena	Choose any Social Phenomena listed	3
Written Communication	Choose any Written Communication listed	3
Program Requirements	General Education Elective	3
	General Education Elective	3
	COM*H173 Public Speaking or Free Elective if taken	3
	COM*H101 Introduction to Mass Communication	3
	COM*H172 Interpersonal Communication or Media Production / Media Writing Course	3
	COM Elective (excluding COM*H100)	3
	COM Elective (excluding COM*H100)	3
	Free Elective ^{ooo}	3
	Free Elective ^{ooo}	3
Free Elective ^{ooo}	3	

Total Credits: 61-62

Any given course may only be used to satisfy one of the competency areas even if it is listed under more than one.

^oMAT*H137 and courses numbered lower than MAT*H137 will not transfer to Connecticut State Universities as Quantitative Reasoning courses.

^{oo}At least one Scientific Knowledge and Understanding OR Scientific Reasoning course must have a lab component.

^{ooo}Students completing 3 years of modern language in high school may substitute 6 credits of General Electives.

Note: Some 4-year colleges may require a language proficiency exam. Students should consider beginning or completing work on foreign language requirements for CCSU, WCSU, SCSU & Charter Oak (not ECSU).

CSCU Pathway Transfer A.A./A.S. Degree

CRIMINOLOGY STUDIES

General education core course listings and definitions appear on pages 53 and 54. Placement testing will determine the sequencing of courses. Additional courses may be required.

Competency or Program Requirement	Course Number and Title	Required Credits
Aesthetic Dimensions/Written Communications	Choose any Aesthetic Dimensions/Written Communications listed	3
Continuing Learning and Information Literacy/Ethics	Choose any Continuing Learning and Information Literacy/Ethics listed	3
Critical Analysis and Logical Thinking/Written Communication	ENG*H101 Composition	3
Historical Knowledge	Choose any Historical Knowledge listed	3
Oral Communication	Choose any Oral Communication course listed	3
Quantitative Reasoning	MAT*H167 Principles of Statistics	3
Scientific Knowledge [◊]	Choose any Scientific Knowledge listed	3-4
Scientific Reasoning [◊]	Choose any Scientific Reasoning listed	3-4
Social Phenomena	SOC*H101 Principles of Sociology	3
Written Communication	Choose any Written Communication listed	3
Program Requirements	CJS*H101 Introduction to Criminal Justice	3
	CJS*H102 Introduction to Corrections	3
	CJS*120 Police and Community	3
	CJS*201 Criminology	3
	CJS*213 Evidence and Criminal Procedure	3
	PSY*H111 General Psychology I	3
	Any General Education Elective listed	3
	Choose one of the following:	
	CJS*H210 Constitutional Law	3
	CJS*H211 Criminal Law I	3
	CJS* 202 Juvenile Delinquency	3
	CJS*H220 Criminal Investigation	3
	CJS*H225 Forensic Science	3
	CJS*H280 Victimology	3
CJS* 290 Practicum in Criminal Justice	3	
CJS* 294 Contemporary Issues in Criminal Justice	3	
CJS* 298 Special Topics in Criminal Justice	3	
Unrestricted Electives ^{◊◊}		6

Total Credits: 61-62

Any given course may only be used to satisfy one of the competency areas even if it is listed under more than one.

[◊]At least one Scientific Knowledge and Understanding OR Scientific Reasoning course must have a lab component.

^{◊◊} Students should consider beginning or completing work on foreign language requirements not already met in high school and beginning work on minor requirements of some CSUs. They may also complete other General Education requirements for CCSU, WCSU, SCSU & Charter Oak (not ECSU).

ENGLISH STUDIES

General education core course listings and definitions appear on pages 53 and 54. Placement testing will determine the sequencing of courses. Additional courses may be required.

Competency or Program Requirement	Course Number and Title	Required Credits
Aesthetic Dimensions/Written Communications	Choose any Aesthetic Dimensions/Written Communications listed	3
Continuing Learning and Information Literacy/Ethics	Choose any Continuing Learning and Information Literacy/Ethics listed	3
Critical Analysis and Logical Thinking/Written Communication	ENG*H101 Composition	3
Historical Knowledge	Choose any Historical Knowledge listed	3
Oral Communication	Choose any Oral Communication course listed	3
Quantitative Reasoning [◊]	Choose any Quantitative Reasoning listed	3
Scientific Knowledge ^{◊◊}	Choose any Scientific Knowledge listed	3-4
Scientific Reasoning ^{◊◊}	Choose any Scientific Reasoning listed	3-4
Social Phenomena	Choose any Social Phenomena listed	3
Written Communication	ENG*H102 Literature and Composition or ENG*H200 Advanced Composition	3
Program Requirements	ENG*H241 World Literature	3
	ENG*H221 American Literature I or ENG*H231 British Literature I ^{◊◊◊}	3
	ENG*H222 American Literature II or ENG*H232 British Literature II ^{◊◊◊}	3
	General Education Elective	3
	General Education Elective	3
	Free Elective ^{◊◊◊◊}	3
	Free Elective ^{◊◊◊◊}	3
	Free Elective ^{◊◊◊◊}	
	Free Elective ^{◊◊◊◊}	3

Total Credits: 61-62

Any given course may only be used to satisfy one of the competency areas even if it is listed under more than one.

[◊]MAT*H137 and courses numbered lower than MAT*H137 will not transfer to Connecticut State Universities as Quantitative Reasoning courses.

^{◊◊}At least one Scientific Knowledge and Understanding OR Scientific Reasoning course must have a lab component.

^{◊◊◊}Must complete one American and one British Literature course.

^{◊◊◊◊}Students should consider beginning or completing work on foreign language requirements for CCSU, WCSU, SCSU & Charter Oak (not ECSU).

CSCU Pathway Transfer A.A./A.S. Degree

HISTORY STUDIES

General education core course listings and definitions appear on pages 53 and 54. Placement testing will determine the sequencing of courses. Additional courses may be required.

Competency or Program Requirement	Course Number and Title	Required Credits
Aesthetic Dimensions/Written Communications	Choose any Aesthetic Dimensions/Written Communications listed	3
Continuing Learning and Information Literacy/Ethics	Choose any Continuing Learning and Information Literacy/Ethics listed	3
Critical Analysis and Logical Thinking/Written Communication	ENG*H101 Composition	3
Historical Knowledge	Choose any Historical Knowledge listed except HIS*H201 or HIS*H202	3
Oral Communication	Choose any Oral Communication course listed	3
Quantitative Reasoning [◊]	Choose any Quantitative Reasoning listed	3
Scientific Knowledge ^{◊◊}	Choose any Scientific Knowledge listed (prefer BIO*H105)	3-4
Scientific Reasoning ^{◊◊}	Choose any Scientific Reasoning listed	3-4
Social Phenomena	Choose any Social Phenomena listed	3
Written Communication	ENG*H102 Literature and Composition or ENG*H200 Advanced Composition	3
Program Requirements	HIS*H201 U.S. History I	3
	HIS*H202 U.S. History II	3
	General Education Elective	3
	General Education Elective	3
	Free Elective	3
	Free Elective	3
	Free Elective	3
	Free Elective	3
	Free Elective	3
	Free Elective	3

Total Credits: 61-62

Any given course may only be used to satisfy one of the competency areas even if it is listed under more than one.

[◊]MAT*H137 and courses numbered lower than MAT*H137 will not transfer to Connecticut State Universities as Quantitative Reasoning courses.

^{◊◊}At least one Scientific Knowledge and Understanding OR Scientific Reasoning course must have a lab component.

MATHEMATICS STUDIES

General education core course listings and definitions appear on pages 53 and 54. Placement testing will determine the sequencing of courses. Additional courses may be required.

Competency or Program Requirement	Course Number and Title	Required Credits
Aesthetic Dimensions/Written Communications	Choose any Aesthetic Dimensions/Written Communications listed	3
Continuing Learning and Information Literacy/Ethics	Choose any Continuing Learning and Information Literacy/Ethics listed	3
Critical Analysis and Logical Thinking/Written Communication	ENG*H101 Composition	3
Historical Knowledge	Choose any Historical Knowledge listed	3
Oral Communication	Choose any Oral Communication course listed	3
Quantitative Reasoning ^o	MAT*H185 Trigonometry or MAT*H186 Pre-Calculus	3-4
Scientific Knowledge	See footnote ^o	4
Scientific Reasoning	See footnote ^o	4
Social Phenomena	Choose any Social Phenomena listed	3
Written Communication	Choose any Written Communication listed	3
Program Requirements	MAT*H254 Calculus I	4
	MAT*H256 Calculus II	4
	MAT*H268 Calculus III: Multivariable	4
	Select one: MAT* 274 Linear Algebra or MAT*H285 Differential Equations or MAT* 287 Foundations of Mathematics	4
	CSC*H205 Visual Basic I	3
	Choose any unrestricted electives ^{oo}	8-9

Total Credits: 60

Any given course may only be used to satisfy one of the competency areas even if it is listed under more than one.

^oFor Scientific Knowledge and Understanding and Scientific Reasoning, students must pick one of the following course sequences:

BIO*H121 General Biology I (first semester) and
BIO*H122 General Biology II (second semester) or
BIO*H155 General Botany (first semester) and
BIO*H145 General Zoology (second semester) or
CHE*H121 General Chemistry I (first semester) and
CHE*H122 General Chemistry II (second semester) or
PHY*H221 Calculus-Based Physics I (first semester) and
PHY*H222 Calculus-Based Physics II (second semester)

^{oo}Students who have taken MAT*H185 should take 9 credits, and students taking MAT*H186 should take 8 credits. Students should consider beginning or completing work on foreign language requirements not already met in high school and beginning work on minor requirements of some CSUs. They may also complete other General Education requirements (for CSCU, WCSU, SCSU, and CO—but not ECSU).

CSCU Pathway Transfer A.A./A.S. Degree

POLITICAL SCIENCE STUDIES

General education core course listings and definitions appear on pages 53 and 54. Placement testing will determine the sequencing of courses. Additional courses may be required.

Competency or Program Requirement	Course Number and Title	Required Credits
Aesthetic Dimensions/Written Communications	Choose any Aesthetic Dimensions/Written Communications listed	3
Continuing Learning and Information Literacy/Ethics	Choose any Continuing Learning and Information Literacy/Ethics listed	3
Critical Analysis and Logical Thinking/Written Communication	ENG*H101 Composition	3
Historical Knowledge	Choose any Historical Knowledge listed	3
Oral Communication	Choose any Oral Communication course listed	3
Quantitative Reasoning ^o	Choose any Quantitative Reasoning listed	3
Scientific Knowledge ^{oo}	Choose any Scientific Knowledge listed	3-4
Scientific Reasoning ^{oo}	Choose any Scientific Reasoning listed	3-4
Social Phenomena	Choose any Social Phenomena listed	3
Written Communication	Choose any Written Communication listed	3
Program Requirements	POL*H111 American Government	3
	Choose any Political Science listed	3
	Choose any Political Science listed	3
	General Education Elective	3
	General Education Elective	3
	Free Elective ^{ooo}	3
	Free Elective ^{ooo}	3
	Free Elective ^{ooo}	3
	Free Elective ^{ooo}	3
Free Elective ^{ooo}	3	

Total Credits: 61-62

Any given course may only be used to satisfy one of the competency areas even if it is listed under more than one.

^oMAT*H137 and courses numbered lower than MAT*H137 will not transfer to Connecticut State Universities as Quantitative Reasoning courses.

^{oo}At least one Scientific Knowledge and Understanding OR Scientific Reasoning course must have a lab component.

^{ooo}Students who have taken MAT*H185 should take 9 credits, and students taking MAT*H186 should take 8 credits. Students should consider beginning or completing work on foreign language requirements not already met in high school and beginning work on minor requirements of some CSUs. They may also complete other General Education requirements (for CSCU, WCSU, SCSU, and CO—but not ECSU).

CSCU Pathway Transfer A.A./A.S. Degree

PSYCHOLOGY STUDIES

General education core course listings and definitions appear on pages 53 and 54. Placement testing will determine the sequencing of courses. Additional courses may be required.

Competency or Program Requirement	Course Number and Title	Required Credits
Aesthetic Dimensions/Written Communications	Choose any Aesthetic Dimensions/Written Communications listed	3
Continuing Learning and Information Literacy/Ethics	Choose any Continuing Learning and Information Literacy/Ethics listed	3
Critical Analysis and Logical Thinking/Written Communication	ENG*H101 Composition	3
Historical Knowledge	Choose any Historical Knowledge listed	3
Oral Communication	Choose any Oral Communication course listed	3
Quantitative Reasoning	MAT*H167 Principles of Statistics	3
Scientific Knowledge ^o	Choose any Scientific Knowledge listed	3-4
Scientific Reasoning ^o	Choose any Scientific Reasoning listed	3-4
Social Phenomena	Choose any Social Phenomena listed	3
Written Communication	Choose any Written Communication listed	3
Program Requirements	PSY*H111 General Psychology I <i>(may be used to fulfill Social Phenomena above, thereby adding 3 credits of unrestricted electives)</i>	3
	PSY*H245 Abnormal Psychology	3
	General Education Elective	3
	General Education Elective	3
	Free Electives ^{oo}	9-12
	Choose two of the following: PSY*H240 Social Psychology PSY*H243 Theories of Personality PSY*H247 Industrial and Organizational Psychology	3 or 6
Choose one of the following: PSY*H201 Lifespan Development PSY*H203 Child Psychology PSY*H204 Child & Adolescent Development PSY*H206 Adolescent and Adult Development	3	

Total Credits: 61-62

Any given course may only be used to satisfy one of the competency areas even if it is listed under more than one.

^oAt least one Scientific Knowledge and Understanding OR Scientific Reasoning course must have a lab component.

^{oo}Students who have taken MAT*H185 should take 9 credits, and students taking MAT*H186 should take 8 credits. Students should consider beginning or completing work on foreign language requirements not already met in high school and beginning work on minor requirements of some CSUs. They may also complete other General Education requirements (for CSCU, WCSU, SCSU, and CO—but not ECSU).

CSCU Pathway Transfer A.A./A.S. Degree

SOCIAL WORK STUDIES

General education core course listings and definitions appear on pages 53 and 54. Placement testing will determine the sequencing of courses. Additional courses may be required.

Competency or Program Requirement	Course Number and Title	Required Credits
Aesthetic Dimensions/Written Communications	Choose any Aesthetic Dimensions/Written Communications listed	3
Continuing Learning and Information Literacy/Ethics	Choose any Continuing Learning and Information Literacy/Ethics listed	3
Critical Analysis and Logical Thinking/Written Communication	ENG*H101 Composition	3
Historical Knowledge	Choose any Historical Knowledge listed	3
Oral Communication	Choose any Oral Communication course listed	3
Quantitative Reasoning	MAT*H167 Principles of Statistics	3
Scientific Knowledge	BIO*H115 Human Biology	4
Scientific Reasoning	Choose any Scientific Reasoning listed	4
Social Phenomena	SOC*H101 Principles of Sociology	3
Written Communication	Choose any Written Communication listed	3
Program Requirements	HSE*H101 Introduction to Human Services	3
	POL*H111 American Government	3
	SOC*H201 Social Problems	3
	ANT*H105 Cultural Anthropology	3
	Free Electives	9-12
	Choose one or two of the following: HSE*H101 Introduction to Human Services HSE*H202 Introduction to Counseling and Interviewing HSE* 243 Human Services Skills and Methods 3 HSE* 236 Legal Issues in Human Services HSE*H281 Human Services Field Work I HSE* 288 Developmental Practicum HSE* 289 Psychiatric Practicum	3 or 6
	Unrestricted Electives [◊]	3-6

Total Credits: 61

Any given course may only be used to satisfy one of the competency areas even if it is listed under more than one.

[◊] Students who have taken MAT*H185 should take 9 credits, and students taking MAT*H186 should take 8 credits. Students should consider beginning or completing work on foreign language requirements not already met in high school and beginning work on minor requirements of some CSUs. They may also complete other General Education requirements (for CSCU, WCSU, SCSU, and CO—but not ECSU).

CSCU Pathway Transfer A.A./A.S. Degree

SOCIOLOGY STUDIES

General education core course listings and definitions appear on pages 53 and 54. Placement testing will determine the sequencing of courses. Additional courses may be required.

Competency or Program Requirement	Course Number and Title	Required Credits
Aesthetic Dimensions/Written Communications	Choose any Aesthetic Dimensions/Written Communications listed	3
Continuing Learning and Information Literacy/Ethics	Choose any Continuing Learning and Information Literacy/Ethics listed	3
Critical Analysis and Logical Thinking/Written Communication	ENG*H101 Composition	3
Historical Knowledge	Choose any Historical Knowledge listed	3
Oral Communication	Choose any Oral Communication course listed	3
Quantitative Reasoning	MAT*H167 Principles of Statistics	3
Scientific Knowledge ^o	Choose any Scientific Knowledge listed	3-4
Scientific Reasoning ^o	Choose any Scientific Reasoning listed	3-4
Social Phenomena	Choose any Social Phenomena listed	3
Written Communication	Choose any Written Communication listed	3
Program Requirements	SOC*H101 Principles of Sociology	3
	Any sociology course (except SOC*H101)	3
	Any 200 level sociology course	3
	Any 200 level sociology course	3
	General Education Elective	3
	General Education Elective	3
	Free Elective ^{oo}	3
	Free Elective ^{oo}	3
Free Elective ^{oo}	3	

Total Credits: 61-62

Any given course may only be used to satisfy one of the competency areas even if it is listed under more than one.

^oAt least one Scientific Knowledge and Understanding OR Scientific Reasoning course must have a lab component.

^{oo}Students who have taken MAT*H185 should take 9 credits, and students taking MAT*H186 should take 8 credits. Students should consider beginning or completing work on foreign language requirements not already met in high school and beginning work on minor requirements of some CSUs. They may also complete other General Education requirements (for CSCU, WCSU, SCSU, and CO—but not ECSU).



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CERTIFICATES, CREDIT PROGRAMS

The certificate programs are designed primarily to assist students in securing employment and to emphasize skills required for that employment. The courses, comprising a sequence of semester hours in a specialty area, are made available to persons who do not seek a degree but who may wish to upgrade their particular skills. Some courses are not offered every semester. Please consult with the Division Director offering the certificate.

Courses may require prerequisites. Refer to the course descriptions located in the back of the catalog.

Accounting

Business Division

Course No.	Title	Credits
CORE AREA: (Required)		
ACC*H113	Principles of Financial Accounting	3
ACC*H117	Principles of Managerial Accounting	3
ACC*H123	Accounting Software Applications	3
ACC*H271	Intermediate Accounting I	3
ACC*H272	Intermediate Accounting II	3

Elect three of the following: (9 credit hours)

ACC*H241	Federal Taxes I	
BBG*H101	Introduction to Business	
BBG*H231	Business Law I	
BMG*H220	Human Resources Management	
BBG*H210	Business Communication	9
Total Credit Hours		24

Program Outcomes

Upon successful completion of all program requirements, graduates will be able to:

1. Demonstrate the use of the concepts and techniques of generally accepted accounting principles in the recording and reporting of financial information.
2. Describe accounting system procedures and techniques.
3. Analyze and use financial reports for decision making.
4. Explain the use of financial information in controlling and evaluating performance.
5. Use the vocabulary of financial and managerial accounting and economics for communicating.
6. Explain how budgeting, activity based costing and strategic cost management foster the effective use of resources and help an organization accomplish its goals.
7. Use computerized spreadsheets and accounting software.

Administrative Support

Business Division

The Administrative Support Certificate offers students a broad range of computer skills, competent management skills and a keen understanding of the business environment. By choosing an area of focus in Accounting, Legal, Technology or General Business studies, students are prepared for career-oriented positions such as entry-level accounting and bookkeeping, information technology specialists, human resources generalists, legal assistants, legal secretaries, and administrative assistants. Concentrations offer an easy transition into the Business Management Associate Degree program. It also may transition to Associate Degree programs in Business Administration, Business Finance, Legal Assistant/Paralegal, and Marketing. Students are encouraged to complete this Certificate Program as a first step towards earning the Associate Degree. The program may be pursued on a full or part-time basis. Students requiring basic skills development courses in reading, English or math as determined by placement testing area advised to begin their program with these basic skills courses to ensure success in the required business courses. For further information, please contact the Business Division Director.

Course No.	Title	Credits
CORE AREA: (Required, 9 credits)		
CSA*H105	Intro to Software Applications	
	or	

CSC *H101	Introduction to Computers	3
BMG*H202	Principles of Management	3
CSA*H205	Advanced Applications	3

FOCUS AREAS: (6 credits)

Accounting

ACC*H113	Principles of Financial Accounting	3
ACC*H117	Principles of Managerial Accounting	3

Legal

BBG*H231	Business Law I	3
BBG*H232	Business Law II	3

Technology

CSC*H231	Database Design I	3
CSA*135	Spreadsheet Applications	3

General Business

BMG*H220	Human Resource Management	3
BMG*H105	Supervision and Organizational Behavior	3
Total Credit Hours		15

Program Outcomes

Upon successful completion of all program requirements, graduates will be able to:

1. Demonstrate basic knowledge of the components of the business environment and environmental factors affecting business today.
2. Demonstrate understanding of the functions of management: planning, leading, organization and controlling.
3. Demonstrate the skills needed to organize thoughts and ideas and the skills needed to communicate them, verbally and in writing, in a manner that can be easily understood in the business environment.

Advanced English Proficiency

Liberal Arts and Behavioral/Social Sciences Division

The English as a Second Language Certificate of Advanced English Proficiency provides non-native speakers of English with personal and professional development opportunities, encourages lifelong learning, and provides employers with measurable proof of proficiency in English. Each of the courses in the program addresses English language skills and abilities necessary for success in academic studies or in careers. Both full and part-time students whose native language is not English are eligible for this program. (Students need to take a minimum of 9 credits of ESL courses to be eligible for this certificate.)

Course No.	Title	Credits
ESL*H152	ESL Reading & Writing V	6
ESL*H169	ESL Writing VI or	
ESL*H162	ESL Reading & Writing VI	3
Elective	† Directed Elective (Communication)	3
ENG*H101	Composition	3
Elective	†† Directed Elective (Reading/Writing)	3
COM*H100	Introduction to Communication	3
Total Credit Hours		21

† Directed Electives (Communication)

ESL*H139 Pronunciation III, ESL*H157 Oral Communications V, COM*H172 Interpersonal Communication, COM*H173 Public Speaking, BBG*H210 Business Communication

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††Directed Electives (Reading/Writing)

ENG*H102 Literature & Composition
 ENG*H200 Advanced Composition
 ENG*H202 Technical Writing
 COM*H157 American Film
 COM*H226 Journalism I or COM*H227 Journalism II
 HIS*H201 U.S. History I or HIS*H202 U.S. History II

**Note: Students who take ESL*H169 instead of ESL*H162 course will need to take three credits in the Directed Electives for Reading/Writing. Students who take the ESL 162 course will NOT need to take three credits in the Directed Electives for Reading / Writing.*

**Program Outcomes

Upon successful completion of all program requirements, graduates will be able to:

1. Demonstrate competence in handling a variety of writing assignments.
2. Comprehend diverse texts which are conceptually abstract and linguistically complex.
3. Understand extended discourse on contextualized and abstract topics such as in lectures, speeches, and reports.
4. Show fluency and comfort in the use of English to express their own ideas.
5. Write with precision and detail.
6. Use spoken English with sufficient accuracy to participate effectively in formal and informal conversations on practical, social and professional topics.

***Students who take the ESL 162 course will NOT need to take three credits in the Directed Electives for Reading/Writing.*

Advanced Manufacturing Machine Technology (formerly Machine Technology Level II)

Science, Technology, Engineering & Mathematics Division

The objective of the certificate program is to provide essential skills and knowledge to individuals seeking a position in Advanced Manufacturing. A prerequisite for entry into this certificate program is placement into or above MAT*H095 and ENG*H063 or consent of the program director.

Course No.	Title	Credits
FIRST SEMESTER		
MFG*H124	Blueprint Reading I	2
MFG*H151	Mfg Machinery – Drill Press	1
MFG*H152	Mfg Machinery – Grinding	2
MFG*H153	Mfg Machinery – Bench Work	2
MFG*H154	Mfg Machinery – Lathe I	2
MFG*H155	Mfg Machinery – Milling I	2
MFG*H156	Mfg Machinery – CNC I	2
	Directed Elective†	3
MFT H5234	Metrology (non-credit course)	
MFT H5235	Manufacturing Math I (non-credit course)	
MFT H5236	Career Awareness/Development/ Computer Application (non-credit course)	
Total Credit Hours		16
SECOND SEMESTER		
MFG*H105	Manufacturing Math II	3
MFG*H125	Blueprint Reading II	3
MFG*H254	Mfg Machinery – Lathe II	3
MFG*H255	Mfg Machinery – Milling II	3
MFG*H256	Mfg Machinery – CNC II	3
	Directed Elective†	3
MFT*H5238	Career Development (non-credit course)	
MFT*H5239	CNC Projects (non-credit course)	
Total Credit Hours		18

Directed Electives†:

CAD*H110 Introduction to CAD
 CAD*H150 CAD 2D
 QUA*H114 Principles of Quality Control

Total Credit Hours

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Applied Behavior Analysis

Liberal Arts and Behavioral/Social Sciences Division

Applied Behavior Analysis (ABA) is a well-developed discipline among the helping professions, with an extensive body of scientific knowledge, established standards for evidence-based practice, specific interventions, recognized experience, and educational requirements for practice. Professionals in applied behavior analysis engage in the specific and comprehensive use of principles of learning, including operant and respondent learning, in order to address behavioral needs of widely varying individuals in diverse settings. Examples of these applications include: building the skills and achievements of children in school settings; enhancing the development, abilities, education, and choices of children and adults with different kinds of disabilities including Pervasive Developmental Disorders, most notably Autism Spectrum Disorders; and augmenting the performance and satisfaction of employees in organizations and businesses.

Course No.	Title	Credits
HSE* H101	Intro to Human Services	3
HSE* H115	Child Advocacy in Human Services	3
HSE* H202	Intro to Counseling & Interviewing	3
HSE* H281	Human Services Field Work	3
SOC* H101	Principles of Sociology	3
PSY* H111	General Psychology I	3
PSY* H258	Behavior Modification	3
PSY* H259	Laboratory in Behavior Modification	3
PSY* H261	Introduction to the Autism Spectrum or	
PSY* H260	Psychology of the Exceptional Child	3
PSY* H262	Applied Behavior Analysis	3
Total Credit Hours		30

Program Outcomes

Upon successful completion of all program requirements, graduates will be able to:

1. Identify the major problem areas and client populations in which behavior analysts can intervene.
2. Demonstrate a beginning understanding of a range of diagnoses that relate to people in need of behavior analytic services and be aware of the necessity of a collaborative working relationship with other professional service providers.
3. Utilize the skills necessary to read and analyze current and future trends as presented in literature related to the field of Applied Behavior Analysis (ABA).
4. Demonstrate an ability to utilize the principles, skills, and tasks required for engagement, assessment, intervention, and termination with a diverse population.
5. Describe and evaluate the ways in which datum are collected, applied, graphed, and evaluated.
6. Describe how the events of the political, social, educational, healthcare, and cultural climate have shaped the response of ABA to the needs of a diverse population.
7. Consider an intervention's rational, aims, limitations, practice, the individuals for whom it is intended, the likely outcomes and the evidence for its effects.
8. Describe evidenced based practices in identification, instruction, and intervention across the life span.
9. Access information regarding theories, research, medical and legal requirements and their relation to current promising practices in education for individuals with ASD and other developmental disabilities.

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10. Provide varied instruction on and opportunity to practice play and leisure skills and methods and strategies for developing play and leisure skills in individuals with ASD and other developmental disabilities.
11. Explain Applied Behavior Analytic (ABA) procedures used to increase skills and replace problem behaviors in children with ASD including discrete trial, direct instruction, and precision teaching.
12. Describe the verbal behavior analysis of language.
13. Understand public and educational policy and legal issues related to ABA.
14. Develop skills to effectively and objectively observe behavior and complete a functional behavior assessment (FBA).
15. Select and implement programs targeting behavioral acquisition and behavioral reduction.
16. Develop strategies to produce behavior change.
17. Successfully complete the BCaBA Behavior Analyst Task List-Third Edition as published by the Behavior Analyst Certification Board.

Athletic Coaching

Allied Health/Nursing/Physical Education Division

The Athletic Coaching certificate is divided into two areas of focus. The first area is designed to develop skills, strategies, understanding of rules and officiating, and organization necessary to coach athletic teams and individuals in grades K-12, youth leagues, and communities. The second area emphasizes the principles and practices of coaching philosophy, sports psychology, pedagogy, physiology, and sports medicine. A study of the prevention of athletic injuries and the care of injuries is included. The certificate will be awarded to those students who successfully complete the six credit program. After completion of course work, students may apply for a State Coaching Permit from the State Board of Education.

Course No.	Title	Credits
HPE*H220	Coaching Adolescents	3
HPE*H230	First Aid	3
Total Credit Hours		6

Program Outcomes

Upon successful completion of all program requirements, graduates will be able to:

1. Apply basic coaching philosophy, styles, and sports/skills techniques.
2. Apply management and liability in coaching.
3. Apply team management.
4. Apply first aid for prevention and initial treatment of injuries in sports and within their community (shock, fractures, poisoning, hypothermia, seizures, strokes, heart attacks).
5. Apply activation procedure for the Emergency Medical System
6. Apply Emergency Action Principles (Rescue Breathing, Airway Maintenance, CPR).

A student who completes the Athletic Coaching Certificate is eligible for the State Coaching Permit (from the State Board of Education) which is needed to coach in grades K-12.

Audio/Video Production

Liberal Arts and Behavioral/Social Sciences Division

The Audio/Video Production Certificate program focuses on the detailed study of audio production, sound design, audio engineering, acoustics, visual composition, lighting design, non-linear video editing, and motion graphics design. A primary function of this program is to serve individuals who have already completed an academic degree or designers currently employed in broadcast media professions interested in skill-enhancement opportunities. Students entering this certificate program should already have a basic foundation in video production and sound design attained through career performance or degree acquisition. If the individual

does not possess either a degree or experience in this field, he/she should consider enrolling in the Digital Arts Technology/Audio-Video Option Associate of Science program. Certificate credits may also be applied toward the Digital Arts and Fine Arts degree programs.

Students must complete the following courses with a grade of "C" or better:

Course No.	Title	Credits
DAT*H108	Digital Imaging I	3
DAT*H110	Digital Video Production I	3
DAT*H218	Electronic Music	
	Composition/Audio Tech I	3
DAT*H219	Electronic Music	
	Composition/Audio Tech II	3
DAT*H220	Acoustics and Sound Design	3
DAT*H224	Digital Video Production II	3
DAT*H226	Motion Graphics for Film & Video	3
DAT*H237	Principles of Sound Recording	3
Total Credit Hours		24

Program Outcomes

Upon successful completion of all program requirements, graduates will be able to:

1. Analyze and evaluate the properties of sound, human hearing, psychoacoustics, electro-acoustic and digital sound reproduction systems.
2. Design and edit analog and digital audio files.
3. Synthesize and apply processes for transforming a concept into a complete video production.
4. Script, produce, edit, and complete original video projects.
5. Design state-of-the-art special effect techniques used in film and video.
6. Complete original projects terminating in deliverable media products with technical documentation.

Automotive Fundamentals

Business Division

The Automotive Fundamentals program seeks to meet the needs of individuals interested in a basic exposure to and/or an exploratory opportunity in the automotive technology field.

Purpose:

- To provide an understanding of the basic operating principles of an automobile.
- To provide in-depth theory of brake, steering and suspension systems.
- Target Population:
- Individuals interested in a basic exposure to automotive systems.
- Individuals interested in an exploratory opportunity in automotive technology.

Course No.	Title	Credits
ATP*H100	Integrated Automotive Systems	3
ATP*H130	Brakes	3
ATP*H150	Steering and Suspension	3
Elective	Automotive	2-3
Elective	Mathematics	3
Total Credit Hours		14-15

To ensure appropriate placement, placement test results and course prerequisites should be reviewed with the Program Coordinator and/or advisor.

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Program Outcomes

Upon successful completion of all program requirements, graduates will be able to: Program should be able to:

1. Perform mathematics related to the occupation, including but not limited to: algebraic expressions, arithmetic, decimals and graphs.
2. Relate knowledge of theory and safety to accomplish certain tasks related to the occupation.
3. Identify and use appropriate tools, testing and measurement equipment to accomplish certain tasks related to the occupation.
4. Use current reference and training materials from accepted industry publications and standards to accomplish certain tasks related to the occupation.
5. Relate knowledge of general engine diagnosis and repair, including but not limited to the engine's: cylinder heads, valve train, block, lubrication, and cooling system.
6. Relate knowledge of suspension and steering systems (including wheel and tire), diagnosis, service, adjustments, alignment and repair.
7. Relate knowledge of general disc and/or drum brake system, hydraulics, power assist, and ABS (antilock brakes), maintenance, adjustment, diagnosis, and repair.

Automotive: Advanced Engine Performance

Business Division

The Advanced Engine Performance program enables a practicing automotive technician to develop the technical knowledge and skills associated with the advanced computer/electronic diagnostic systems and emission systems of today's automobile.

Purpose:

- To provide an understanding of automobile engine operation and repair.
- To provide an understanding of advanced electronic diagnosis and automotive emissions.
- To provide an understanding of the relationship between scientific principles and their application in the automobile.

Target Population:

- Individuals seeking employment opportunities in the automotive service field.
- Individuals seeking to upgrade their technical skills.
- Individuals preparing for career advancement opportunities in the automotive service field.

Course No.	Title	Credits
ATP*H100	Integrated Automotive Systems	3
ATP*H120	Engine Repair	3
ATP*H110	Automotive Electrical Systems	3
ATP*H210	Engine Performance	3
ATP*H220	Automotive Emissions	3
ATP*H291	Cooperative Work Experience II	3
Total Credit Hours		18

To ensure appropriate placement, placement test results and course prerequisites should be reviewed with the Program Coordinator and/or advisor.

Program Outcomes

Upon successful completion of all program requirements, graduates will be able to:

1. Perform mathematics related to the occupation, including but not limited to: algebraic expressions, arithmetic, decimals and graphs.
2. Use scientific methods and critical thinking to solve problems in science related to the occupation, including but not limited to: electricity, chemical reactions, heat, motion, and hydraulics.

3. Demonstrate workplace skills related to the occupation including but not limited to: preparing a resume, seeking employment, maintaining a safe and healthy workplace environment, demonstrating workplace ethics and teamwork.
4. Apply knowledge of theory and safety to accomplish certain tasks related to the occupation.
5. Identify and use appropriate tools, testing and measurement equipment to accomplish certain tasks related to the occupation.
6. Use current reference and training materials from accepted industry publications and standards to accomplish certain tasks related to the occupation.
7. Apply knowledge of general engine diagnosis and repair: including but not limited to the engine's: cylinder heads, valve train, block, lubrication, and cooling system.
8. Apply knowledge of general electrical/electronic systems, including but not limited to: starting, charging, lighting, wiring, accessories, diagnosis and repair.
9. Apply knowledge of general engine performance, including but not limited to: computer controls, ignition, fuel, exhaust, and emission systems, and their maintenance, diagnosis, adjustments, and repair.

Automotive: General Automotive Service

Business Division

The General Automotive Service program is designed to accommodate individuals desiring an understanding of engine operation and repair, along with knowledge of automotive electrical, brake, steering and suspension systems.

Purpose:

- To provide an understanding of automobile engine operation and repair.
- To provide an understanding of automotive electrical theory and its application.
- To provide in-depth theory of brake, steering and suspension systems.
- To provide an understanding of the relationship between scientific principles and their application in the automobile.

Target Population:

- Individuals seeking entry-level employment opportunities in the automotive service field.
- Individuals seeking to upgrade their technical skills.
- Individuals preparing for career advancement opportunities in the automotive service field.

Course No.	Title	Credits
ATP*H100	Integrated Automotive Systems	3
ATP*H110	Automotive Electrical Systems	3
ATP*H120	Engine Repair	3
ATP*H130	Brakes	3
ATP*H150	Steering and Suspension	3
ATP*H290	Cooperative Work Experience I	3
Total Credit Hours		18

To ensure appropriate placement, placement test results and course prerequisites should be reviewed with the Program Coordinator and/or advisor.

Program Outcomes

Upon successful completion of all program requirements, graduates will be able to:

1. Perform mathematics related to the occupation, including but not limited to: algebraic expressions, arithmetic, decimals and graphs.
2. Use scientific methods and critical thinking to solve problems in science related to the occupation, including but not limited to: electricity, chemical reactions, heat, motion, and hydraulics.

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- Demonstrate workplace skills related to the occupation, including but not limited to: preparing a resume, seeking employment, maintaining a safe and healthy workplace environment, demonstrating workplace ethics and teamwork.
- Apply knowledge of theory and safety to accomplish certain tasks related to the occupation.
- Identify and use appropriate tools, testing and measurement equipment to accomplish certain tasks related to the occupation.
- Use current reference and training materials from accepted industry publications and standards to accomplish certain tasks related to the occupation.
- Apply knowledge of general engine diagnosis and repair, including but not limited to the engine's: cylinder heads, valve train, block, lubrication, and cooling system.
- Apply knowledge of suspension and steering systems (including wheel and tire), diagnosis, service, adjustments, alignment and repair.
- Apply knowledge of general disc and/or drum brake system, hydraulics, power assist, and ABS (antilock brakes), maintenance, adjustment, diagnosis, and repair.
- Apply knowledge of general electrical/electronic systems, including but not limited to, starting, charging, lighting, wiring, accessories, diagnosis and repair.

CADD Modeling (Advanced)

Science, Technology, Engineering & Mathematics Division

The need to attract more students into engineering is a national concern. The Advanced CADD Modeling Certificate is the third of the CADD certificates and continues to prepare a student, upgrading their skills, for employment and career advancement opportunities. NVCC's Engineering Technologies programs prepare graduates to be engineering technicians who are able to respond to the changing demands of Connecticut's "high tech" industries.

Course No.	Title	Credits
MFG*H201	Computer-Aided Mfg II	3
CAD*H220	Parametric Design	3
CAD*H275	CAD Animation 3D Studio Max	4
CAD*H294	Senior Project	4
Elective	Directed Elective†	3
Total Credit Hours		17

†Directed Electives:

CAD*H285 Computer Integrated Manufacturing I
 CAD *H286 Advanced Modeling Techniques
 MAT*H232 Applied Calculus
 MAT*H254 Calculus I
 MEC*H251 Materials Strength
 MFG*H210 Materials of Engineering
 MFG*H275 Mechanics of Materials

Program Outcomes

Upon successful completion of all program requirements, graduates will be able to:

- Demonstrate a thorough understanding of engineering graphics and conventional drafting practices such as geometric constructions, orthographic, projection, isometric, section, detail, auxiliary views, and geometric dimensioning and tolerancing.
- Develop an engineering concept through the detail design process and produce professionally finished engineering drawings.
- Demonstrate a high level of proficiency in the use of state-of-the-art CAD software and be able to adapt to new CAD systems as they are developed.
- Do basic and advanced manual CNC programming.
- Write computer generated CNC programming.
- Be aware of new developments in CAD and related areas.
- Organize activities and perform work in an efficient, accurate manner.

- Utilize advanced design methods, such as parametric feature based modeling, animation, simulation, and web-based design.

2D Computer-Aided Drafting (CAD)

Science, Technology, Engineering & Mathematics Division

The need to attract more students into engineering is a national concern. The 2D Computer-Aided Drafting Certificate meets the need of individuals interested in a basic exposure to, and/or exploration of, using and applying 2D CAD. This opportunity prepares a student to use and/or pursue a career using CAD in numerous fields. NVCC's Engineering Technologies programs prepare graduates to be engineering technicians who are able to respond to the changing demands of Connecticut's "high tech" industries.

Course No.	Title	Credits
CAD*H150	2D CAD Drafting	3
MFG*H104	Manufacturing Processes	4
ENG*H101	Composition	3
MAT*H137	Intermediate Algebra	3
Elective	Directed Elective†	3
Total Credit Hours		16

†Directed Electives:

CAD*H200 3D CAD Modeling
 CAD*H220 Parametric Design
 MAT*H172 College Algebra (or higher level Mathematics course)
 MFG*H106 Computer-Aided Manufacturing I
 TCN*H101 Introduction to Engineering Technology

Program Outcomes

Upon successful completion of all program requirements, graduates will be able to:

- Demonstrate basic knowledge and understanding of engineering graphics and conventional 2-dimensional drafting practices such as geometric constructions, orthographic, projection, isometric, section, detail, and auxiliary views.
- Demonstrate proficiency in the use of CAD software for 2-dimensional applications.
- Explain concepts and requirements for drawings used in the manufacturing process.
- Create 2D professionally finished drawings from working drawings under the supervision of a senior draftsman.
- Demonstrate the proper setup and procedures for various manufacturing processes.
- Apply language arts skills related to the occupation, including but not limited to: critical thinking, reading, and writing.
- Apply mathematics required for basic drafting and manufacturing applications.

3D CADD Modeling

Science, Technology, Engineering & Mathematics Division

The need to attract more students into engineering is a national concern. The 3D Computer-Aided Drafting Design Certificate continues to prepare a student to use and/or pursue a career using CAD and meets the need of individuals:

- seeking entry-level employment opportunities.
- seeking to upgrade their technical skills.
- preparing for career advancement opportunities.

NVCC's Engineering Technologies programs prepare graduates to be engineering technicians who are able to respond to the changing demands of Connecticut's "high tech" industries.

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Course No.	Title	Credits
MFG*H106	Computer-Aided Mfg I	3
CAD*H200	3D CAD Modeling	4
CAD*H220	Parametric Design	3
Elective	Directed Elective†	3
Total Credit Hours		13

†Directed Electives

CAD*H275	CAD Animation 3D Studio Max
CAD*H285	Computer Integrated Manufacturing I
CAD*H286	Advanced Modeling Techniques
CAD*H294	Senior Project
MAT*H185	Trigonometric Functions (or higher level Mathematics course)
MFG*H104	Manufacturing Processes
MFG*H201	Computer-Aided Manufacturing II

Program Outcomes

Upon successful completion of all program requirements, graduates will be able to:

1. Demonstrate a thorough understanding of engineering graphics and conventional drafting practices such as geometric constructions, orthographic, projection, isometric, section, detail, auxiliary views, and geometric dimensioning and tolerancing.
2. Starting with an engineering design concept, create 3D geometric models, develop tolerance requirements, perform basic analysis functions under the supervision of a degreed engineer, and produce professionally finished engineering drawings, suitable for use in manufacturing.
3. Demonstrate a thorough understanding of 3-dimensional wire frame, surface, and solid modeling concepts, procedures, and applications.
4. Perform basic CNC programming.

Child and Family Services

Liberal Arts and Behavioral/Social Sciences Division

The increase in the number of families in crisis and the rising number of maltreated children in our communities make it necessary to have trained Human Services professionals who are skilled and knowledgeable about the unique needs of these populations. The Child & Family Services Certificate curriculum focuses on such areas as juvenile justice, single-parent families, divorce, sexuality, abuse, neglect, poverty, adoption, child protection, disability services, mental health, and cultural diversity.

Course No.	Title	Credits
HSE* H101	Intro to Human Services	3
HSE* H202	Intro to Counseling & Interviewing	3
HSE* H281	Human Services Field Work	3
SOC* H101	Principles of Sociology	3
SOC* H210	Sociology of the Family	3
SOC* H201	Contemporary Social Issues	3
or		
SOC* H221	Social Inequality	3
HSE*H115	Child Advocacy in Human Services	3
PSY* H111	General Psychology I	3
Elective	Psychology Elective†	3
PSY* H258	Behavior Modification	3

Total Credit Hours **30**

†Directed Electives:

PSY* H203	Child Development
PSY*H204	Child & Adolescent

Program Outcomes

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

1. Demonstrate a beginning understanding of a range of issues that people in need of human services experience.
2. Utilize critical thinking skills necessary to read and analyze current and future trends as presented in literature in the field of human services and child and family services.
3. Identify socio-cultural dynamics that underlay issues in American society and politics.
4. Demonstrate an ability to utilize the skills, and tasks required for engagement, assessment, case planning, intervention and termination with a diverse population.
5. Present a well organized, comprehensive oral report before a group.
6. Compare and contrast the ecological, functional, and conflict perspectives to understand and analyze social issues such as alienation, poverty, crime and health.
7. Describe how the events and influences of the political, social, and economic climate have shaped the American response to human needs and the historical development of social welfare.
8. Develop an understanding of the expectations of a personal and professional code of ethical standards.
9. Demonstrate an ability to provide referrals to services, concrete information, and emotional support to clients with a goal of promoting empowerment skills.
10. Identify causes, consequences and solutions to inequality due to race, age, gender, religion and economics.

CNC Machining

Science, Technology, Engineering & Mathematics Division

Entry-level programmers as well as machinists/tool makers are needed in the college's service region. The CNC Machining Certificate primarily supports two career ladders;

- An individual with no prior experience in machining or manufacturing, who after the completion of the CNC Machining Certificate, should be able to be employed as an entry level programmer.
- An individual with prior experience using manual machines wishing to upgrade skills.

NVCC's Engineering Technologies programs prepare graduates to be engineering technicians who are able to respond to the changing demands of Connecticut's "high tech" industries.

Course No.	Title	Credits
MFG*H104	Manufacturing Processes	4
CAD*H150	CAD 2D	3
MFG*H106	Computer-Aided Mfg I	3
MFG*H201	Computer-Aided Mfg. II	3
Elective	Directed Elective	3
Elective	Directed Elective†	3
Total Credit Hours		19

†Directed Electives:

CAD*H200	3D CAD Modeling
CAD*H220	Parametric Design
EET*H102	Electrical Applications
MAT*H172	College Algebra (or higher level Mathematics course)
MEC*H114	Statics
MEC*H251	Materials Strengths
Any MFG* course	
PHY*H121	General Physics I
PHY*H122	General Physics II
TCN*H101	Introduction to Engineering Technology

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Program Outcomes

Upon successful completion of all program requirements, graduates will be able to:

1. Demonstrate basic knowledge and understanding of engineering graphics and conventional 2-dimensional drafting practices such as orthographic and isometric projection, section, detail, auxiliary views, and geometric dimensioning and tolerancing.
2. Demonstrate proficiency in the use of CAD software for 2-dimensional applications.
3. Explain concepts and skills required for manufacturing processes.
4. Demonstrate proper setup and procedures for various manufacturing processes.
5. Write basic and advanced MDI NC programs.
6. Produce NC programs using Mastercam®, being able to:
 - a. import or generate CAD files
 - b. utilize tool and material libraries.
 - c. generate tool pass.
 - d. verify tool pass.
 - e. post process using appropriate controller.

Computer Crime Deterrence

Liberal Arts and Behavioral/Social Sciences and Business Divisions

This certificate program is designed to enhance skill development for those people who are employed in a career field dealing with computer security or for people seeking entry into such a career field and for those people who want to use a computer in an assortment of ways. Upon completion of this certificate, students will possess the skills necessary to manage a computer security program or to protect their own personal computers from attack.

Credits earned in this certificate program are applicable toward an Associate of Science Degree in Criminal Justice/Public Safety. These courses are offered in the day or evening for the convenience of those adults who are employed full-time.

Required Courses

Course No.	Title	Credits
CJS*H224	Computer Crime	3
CJS*H234	Computer Security and Data Protection	3
CJS*H235	Introduction to Warfare and Security	3
CSC*H101	Introduction to Computers	3
CST*H120	Introduction to Operating Systems	3
Total Credit Hours		15

Program Outcomes

Upon successful completion of all program requirements, graduates will be able to:

1. Discuss the various problems encountered in the area of information security.
2. Describe current strategies used to protect data.
3. Describe the range of services available for use over the Internet.
4. Discuss the legal issues affecting the recovery of evidence during investigations involving the Internet.
5. List and describe the civil liability issues associated with Internet investigations.
6. List and describe some of the more common viruses that have infected computer systems.
7. Apply State and Federal law and develop an investigative plan to address the relevant issues.
8. Identify basic concepts and computer terminology relative to hardware and software applications.
9. Understand the growing dependence and reliance on personal computers in our society.
10. Identify the availability of technology-based products on the market today.
11. Develop a level of comfort when using office productivity software such as MS Word, Excel, Powerpoint, and MS Access.

12. Understand the uses of database management software and its applicability to the business environment.
13. Identify a variety of Network Operating System Software and the features and functionality each provides.
14. The student will be able to work with all the MS-DOS commands, both internal and external.
15. The student will be able to understand the purpose and use of the memory management software.
16. The student will be able to author batch file scripts when necessary.
17. The student will work with the various components of WINDOWS 95 and the system registry.
18. The student will understand various Network Operating Systems (NOS) used in Local Area Networks (LANS).
19. The student will understand the various components, including physical designs of LANS.

Computer Networking

Business Division

This certificate is designed for those individuals who desire an understanding of personal computer networks and their use in the workplace. The course of study will provide the student with a thorough knowledge of local area network design, network management, installation, servicing and support. Students will possess an understanding of PC network technology and programming, set-up, communications, utilities, and system management.

Please see advisor for alternative classes.

Course No.	Title	Credits
CSC*H205	Visual Basic I	3
	or	
CSC*H113	Programming I	
CST*H120	Intro to Operating Systems	3
CST*H130	Network Essentials I	3
Three Elective Courses (9 credits) from this list		
CST*H235	Network Systems	3
CST*H236	Advanced Network Systems	3
CST*H239	Servicing & Support of LANS†	3
CST*H274	Network Security Technology	3
CST*H248	Practices in Security Management	3
CSC*H101	Introduction to Computers	3
Total Credit Hours		18

†Please see advisor for alternative classes.

Program Outcomes

Upon successful completion of all program requirements, graduates will be able to:

1. Provide the student with the personal computer skills necessary to effectively function in today's workplace.
2. Offer a "hands-on" learning experience in the personal computer networking software most commonly used in business and industry.
3. Provide the opportunity for a more advanced technical understanding of personal computer local area networks, their design, installation and management.
4. Provide entry-level opportunities to individuals seeking positions requiring computer networking skills.
5. Upgrade the personal computer knowledge and skills of individuals currently employed.
- 6.

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Criminal Justice

Liberal Arts and Behavioral/Social Sciences Division

This certificate program focuses on skills development for those people who are already in the law enforcement and security services and for those who seek entry-level employment in those services. The program may be pursued on a full or part-time basis. For further information, consult the Division Director or the Program Coordinator.

Course No.	Title	Credits
CJS*H101	Introduction to Criminal Justice	3
CJS*H102	Introduction to Corrections	3
CJS*H103	Introduction to Security	3
CJS*H105	Introduction to Law Enforcement	3
CJS*H211	Criminal Law I	3
CJS*H217	American Legal Systems	3
CJS*H220	Criminal Investigation	3
CJS*H293	CJS Cooperative Work Experience	3
Total Credit Hours		24

Program Outcomes

Upon successful completion of all program requirements, graduates will be able to:

1. Explain the basic structure and functions of the American Criminal Justice System.
2. Explain the structure of the federal and state court systems.
3. Identify the functions and services of private security.
4. Explain the computer crime problem.
5. Explain the development of probation, parole and community supervision.
6. Explain the development of the corrections system in the United States.
7. Demonstrate the various methods of taking written statements and confessions.
8. Define the term investigation and the objectives of a criminal investigation.
9. Explain some of the basic issues and problems in policing, the courts, and corrections in America today.
10. Explain the Bill of Rights and those specific rights guaranteed by the First, Fourth, Fifth, Sixth, Eighth and Fourteenth Amendments.
11. Explain the concept of criminal law, including its purpose as an agent of social control.
12. Define and explain the elements which identify the offenses of assault, sex crimes, burglary, arson, larceny, robbery and homicide.
13. Explain how state and local law enforcement agencies originated in the United States and how they currently function.
14. Identify the areas that establish a police officer's authority to arrest.
15. Demonstrate work skills relevant to a criminal justice agency.
16. Integrate the theoretical and practical application of the Criminal Justice Program.

Culinary Arts

Business Division

The Culinary Arts certificate program consists of 25 or 27 credits of specific skill courses which will prepare people for careers in food services. Students may pursue the program on a full or part-time basis. Students who wish to pursue the Associate in Applied Science degree may apply the certificate credits to the Foodservices Management or Hotel Management degree. As with other certificate programs, the student must first apply to the Admissions Office. Students requiring basic skills development courses in reading, English, or math as determined by placement testing are advised to begin their program with these basic skills courses to ensure success in the required hospitality courses.

Because of the nature of the program, special tuition and fees for foods, etc., may be required. The program takes four semesters of courses (fall, spring, fall and spring). Please refer to the section on course descriptions for prerequisites.

Course No.	Title	Credits
HSP*H100	Introduction to the Hospitality Industry	3
HSP*H101	Principles of Food Preparation	3
HSP*H102	Food Production & Purchasing	3
HSP*H109	Food Safety Certification	1
	or	
HSP*H108	Sanitation and Safety†	3
HSP*H135	Service Management	3
HSP*H202	Catering & Event Management	3
BIO*H111	Introduction to Nutrition	3
Elective	Hospitality Management	3
Chose one baking elective below:		
HSP*H103	Principles of Baking I	3
	or	
HSP*H215	Principles of Baking II	
	or	
HSP*H216	Artisan Bread	
Total Credit Hours		25 or 27

† Students interested in the degree program should take HSP*H108

Program Outcomes

Upon successful completion of all program requirements, graduates will be able to:

1. Identify, organize, plan and allocate resources in foodservice operations such as time, materials and facilities, money, and human resources.
2. Demonstrate a working knowledge of food preparation theories and techniques, and utilize food production knowledge (quantity and quality standards) to meet production requirements of a foodservice operation within a projected budget.
3. Effectively work with others as a member of a team, serving clients and customers, teaching others new skills, exercise leadership behaviors, negotiate, and work with others from diverse backgrounds.
4. Obtain nationally recognized professional certification in such areas as food sanitation (as required by State Statute) and food, beverage, & labor cost controls. Demonstrate appropriate personal hygiene.
5. Organize and evaluate information from a variety of sources including food preparation and service techniques and costs, food and related purchasing specifications, catered events planning, research data, and computer applications and Internet output. Communicate the results to others using oral, written, graphic or multimedia methods.
6. Apply concepts of procurement and inventory to purchase, receive, store, issue and distribute food and related items in a foodservice operation.
7. Identify current trends in foodservice industry delivery systems and functions, and operate effectively within them. Make suggestions to modify existing systems to improve products or services, and develop new or alternate systems.
8. Judge which set of foodservice procedures, tools or machines, including computer applications, will produce the desired results, and apply such technology to task.
9. Demonstrate behavior and self-management reflective of personal and professional ethical conduct.
10. Perform basic mathematical computations accurately and appropriately, especially with regard to food and beverage production, purchasing and cost controls.
11. Identify and apply basic concepts of human nutrition and health in the preparation and service of food.
12. Demonstrate work readiness through resume preparation, appropriate business dress and behavior, and assertive communication skills.

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Dance

Liberal Arts and Behavioral/Social Sciences Division

This certificate in dance is designed for individuals who are looking to enhance their technique, broaden their repertoire, and build their choreographic options and production skills. This program is tailored for those who wish to work or presently work with either children or adults in studio, theatre, early childhood or community service environments. Individuals wishing to broaden their dance foundation for working in the art or entertainment industries also may be served.

Many individuals who teach dance have a limited access to higher education in dance. There is a need for technical as well as artistic training. This program will address these needs by providing a firm foundation in the major aspects of dance so that the student may feel confident in his/her involvement in the dance world.

A Formal Pathways to Dance Certification K-12 has been designed for the public school teacher wishing to obtain the State of Connecticut's pending certification.

Students entering this program should have a basic foundation in dance. If the individual does not possess either a degree or experience, he/she may consider enrolling in the Visual and Performing Arts/Dance Degree option. Credits may be applied toward the degree program. Students may substitute, with permission, other dance offerings to fit their needs.

Students must successfully complete the following credit courses with a "B" average:

Course No.	Title	Credits
DAN*H101	History & Appreciation of World Dance	3
DAN*H102	Ballet I: Renaissance to Romantic	3
DAN*H111	Jazz Dance I: Afro-Caribbean/American or	
DAN*H112	Jazz Dance II: Broadway and Film	3
DAN*H113	Modern I: Pioneers of America	3
DAN*H202	Ballet II: Classical to Contemporary	3
DAN*H213	Modern Dance II	3
DAN*H221	Repertory/Ensemble I	3
DAN*H222	Choreographic Principles/Ensemble I	3
	Total Credit Hours	24

Program Outcomes

Upon successful completion of all program requirements, graduates will be able to:

1. Demonstrate mastery skills and techniques necessary for studio and/or theatre dance.
2. Execute a comprehensive historical repertoire of various dance genres using appropriate movement vocabulary.
3. Demonstrate dance as a means of communication and as a reflection of one's society.
4. Make an accurate assessment of personal & students' (if teaching) technical and artistic strengths and weaknesses.
5. Execute effectively production skills from the choreographic process to the performance.

Dietary Supervision

Business Division

The certificate is designed primarily for health care food service personnel seeking professional development. In order to satisfy industry standards, students must successfully complete the following credit courses with a grade of "C" or better, and pass the Food Protection Certification Exam offered through the Educational Foundation of the National Restaurant Association. Credits may be applied toward the degree program in Foodservice Management.

Course No.	Title	Credits
HSP*H101	Principles of Food Preparation†† or	3
HSP*H102	Food Production & Purchasing†††	

HSP*H109	Food Safety Certification†	1
BIO*H111	Introduction to Nutrition	3
	Total Credit Hours	7

†HSP*H108 - Foodservice Sanitation (3 credits) may be substituted for HSP*H109.

††Course substitution may be allowed with written approval of the Hospitality Management Program Coordinator.

†††Course substitution may be allowed with written approval of the Hospitality Management Program Coordinator. Prerequisite of HSP*H101 may be waived with approval of the Hospitality Management Program Coordinator.

Program Outcomes

Upon successful completion of all program requirements, graduates will be able to:

1. Identify agents and vectors of food-borne illness.
2. Employ proper sanitary procedures in the purchasing, receiving, storing, issuing, preparing, and serving of food products.
3. Design basic sanitation training for foodservice employees.
4. Discuss federal, state and local regulations and standards of foodservice sanitation.
5. Inspect, from a sanitation viewpoint, equipment and facility design.
6. Qualify for certification in applied foodservice sanitation from the Educational Foundation of the National Restaurant Association.
7. Define, discuss, and employ basic food preparation theories and techniques.
8. Recognize and use a variety of kitchen tools, equipment, and raw food products.
9. Plan, organize, prepare, and evaluate finished food items from the raw state.
10. Memorize, interpret, and evaluate written recipes; mathematically expand and reduce these recipes; be able to pre-cost the recipes; understand computer applications regarding these calculations.
11. Define, discuss, and employ beginning kitchen management theories and techniques. Plan, organize and communicate (through written papers) information gained through journal research.
12. Define, discuss, and explain the importance of nutrition to health status.
13. Define and apply the components of nutrition to various age groups.
14. Apply acquired nutrition knowledge to daily living experiences.
15. Identify their personal nutritional status through use of computer nutrition program used in conjunction with written daily food diary.

Disabilities/Mental Health

Liberal Arts and Behavioral/Social Sciences Division

This program is designed for students who will work in a variety of mental health settings (many of which have been created through deinstitutionalization) in both the mental health and developmental disabilities fields. Students are prepared for positions in a wide variety of agencies such as crisis centers, community residencies, sheltered workshops, halfway houses, or social rehabilitation clubs, which specifically serve this population.

Course No.	Title	Credits
HSE*H101	Introduction to Human Services	3
HSE*H133	Disabilities and Mental Health	3
PSY*H111	General Psychology I	3
SOC*H101	Principles of Sociology	3
SOC*H201	Contemporary Social Issues or	
SOC*H221	Social Inequality	3

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Elective	Psychology	3
HSE*H202	Introduction to Counseling & Interviewing	3
PSY*H258	Behavior Modification	3
PSY*H245	Abnormal Psychology	3
HSE*H281	Human Services Field Work I	3
	Total Credit Hours	30

Program Outcomes

Upon successful completion of all program requirements, graduates will be able to:

1. Demonstrate a beginning understanding of a wide range of diagnoses that relate to people in need of social work service, and be knowledgeable about the necessity of a collaborative relationship with area support.
2. Identify the diverse challenges facing people with mental illness, and use effective advocacy strategies to address such challenges.
3. Describe confidentiality guidelines, and Human Services ethical standards of practice, and recognize his or her own personal limitations and professional behavior as a helper.
4. State the psychological theories that may help the Human Services Provider.
5. Explain what effects the social conditions in the United States have on the developmental disabilities and how to deal with them.
6. Understand sociocultural dynamics that underlay social issues in America today.
7. Be knowledgeable about formal and informal assessment practices that reflect both the needs and strengths of disadvantaged people.
8. Provide disadvantaged people the support and information necessary to build self-esteem and empowerment skills.
9. Apply knowledge and skills needed to work with people with mental illness in a variety of agency settings.
10. Demonstrate the ability to utilize the skills and tasks required for engagement, assessment, case planning, intervention and termination.

Drug and Alcohol Recovery Counselor (DARC)

Liberal Arts and Behavioral/Social Sciences Division

The DARC Certificate can be completed in 1 ½ or 2 years by completing the core DARC courses (DAR H101, DAR H111, DAR H112, DAR H158) in spring and completing the internship and remaining classes in the next academic year. All DARC courses (DAR*H101, H111, H112, H158, H213, H220) are open to any student at the college, provided they pass the prerequisite of ENG*H063 or ENG*H096 with a C or better or test into ENG H101. The internship runs fall/spring of each academic year.

Employment

Students with a DARC Certificate degree are highly sought after for entry level opportunities as substance abuse counselors in public and private agencies such as community and residential health facilities, local hospitals, prevention organizations, youth service agencies, and criminal justice system. According to the Occupational Outlook Handbook (2016-17 Ed.), employment of addiction counselors is expected to grow by 22 percent from 2014-2024, much faster than average as addiction counseling services are increasingly covered by insurance. Connecticut is considered one of the states with the highest concentration of jobs in this field with a mean average wage of \$46, 920.

Curriculum

The DARC Certificate can be completed in 1 ½ or 2 years by completing the core DARC courses (DAR H101, DAR H111, DAR H112, DAR H158) in spring and completing the internship and remaining classes in the next academic year. All DARC courses (DAR*H101, H111, H112, H158, H213, H220) are open to any student at the college, provided they pass the prerequisite of ENG*H063 or ENG*H096 with a C or better or test into ENG H101. The internship runs fall/spring of each academic year.

DARC Internship Admission Process

Acceptance into the DARC Internship (DAR H251, DAR H252) is selective and not guaranteed. All students participate in a screening and interview process (spring semester) which is intended to evaluate whether the applicant possesses specific skills, behaviors and attitudes that are necessary to work with persons with addiction and co-occurring disorders. Interested applicants must have completed or be enrolled in DAR H101, H111, H112, H158 and ENG H101, and pass with a C or better. Students must complete and submit a formal DARC Application prior to the interview. Applications are distributed during the spring semester (Feb/March) each year. After the interviews, students are formally notified regarding acceptance to internship and ability to register for DAR H251 Counseling Internship I for the fall semester.

Course No.	Title	Credits
DAR*H101	Public Health Issues in Abuse and Addiction	3
DAR*H111	Addiction Counseling I	3
DAR*H112	Group Counseling Theory and Techniques	3
DAR*H158	Biology of Addiction	3
DAR*H213	Addiction Counseling II	3
DAR*H251	Counseling Internship I	6
DAR *H220	Co-Occurring Counseling	3
DAR *H252	Counseling Internship II	6
	Total Credit Hours	30

Program Outcomes

Upon successful completion of the DARC Certificate the successful graduate should be able to:

1. Describe the physical, emotional and psychological basis of addiction
2. Define the causes and characteristics of substance dependence and addiction relevant to various populations and cultures
3. Define and apply counseling theories to addiction counseling including Adlerian, Existential, Person-Centered, Harm Reduction, Motivational Interviewing, Gestalt, Reality, Behavior, Cognitive Behavioral, Solution Focused, and Feminist perspectives
4. Define, demonstrate and apply ethical principles and practices according to NAADAC, the CCB, and professional behavior for working directly in the counseling field
5. Demonstrate knowledge and skills related to relapse prevention education and strategies
6. Describe the categories of drugs and effects on psychological functioning
7. Describe characteristics of individuals with co-occurring disorders and specific treatment strategies for working with this population
8. Demonstrate the ability to develop, write and implement treatment plans for individuals with addiction and co-occurring disorders
9. Co-facilitate group counseling sessions under supervision
10. Describe the use of case management in the treatment of persons with addiction and co-occurring disorders
11. Demonstrate ability to develop discharge plans for persons with addiction and co-occurring disorders
12. Demonstrate understanding of the screening, intake and evaluation process in addiction and co-occurring disorders treatment

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13. Demonstrate ability to keep accurate records of group/individual process, treatment and discharge planning
14. Describe and demonstrate skills involved in crisis intervention
15. Describe the purpose and availability of self-help groups for persons with addiction/co-occurring disorders
16. Describe the effects of substance abuse on the family, educational needs and stages of recovery for families
17. Describe the stages of change model and its application to treatment of addiction and co-occurring disorders
18. Describe the use of multicultural counseling skills to assessment, treatment and aftercare issues of persons of different gender, ethnicity, disability, adolescents, the elderly, GBLT and homeless
19. Describe the transdisciplinary foundations and competencies required of addiction counselor (TAP 21)
20. Describe the use of medication in the treatment of addiction and co-occurring disorders
21. Demonstrate engagement in community service activities to educate others about the process, dangers and treatment of addiction
22. Discuss the purpose of clinical supervision and participate in the supervision process
23. Write a comprehensive case study based on a biopsychosocial assessment, including diagnosis, treatment plan goals and interventions acceptable for submission to the Connecticut Certification Board (CCB).

Early Childhood Education

Liberal Arts and Behavioral/Social Sciences Division

The certificate program consists of thirty (30) credits in Early Childhood Education. These courses are designed to develop the basic skills and knowledge necessary in Early Childhood Education. The curriculum is a form of a connector, or intensified refresher program, for those who have either been away from academic studies for a while and/or have been engaged in group child care without formal training in the area. For further information, contact the Program Coordinator.

Course No.	Title	Credits
ENG*H101	Composition	3
PSY*H111	General Psychology I	3
PSY*H203	Child Development	3
ECE*H101	Introduction to Early Childhood Education	3
ECE*H103	Creative Experiences for Children	3
ECE*H109	Science and Math for Children	3
ECE*H141	Infant/Toddler Development	3
ECE*H176	Health, Safety & Nutrition	3
ECE*H210	Observation and Participation	3
ECE*H231	Early Language and Literacy Development	3
Total Credit Hours		30

Program Outcomes

Upon successful completion of all program requirements, graduates will be able to:

1. Utilize the writing skills for developing lessons and composing reports.
2. Be knowledgeable about various theories as they apply to young children.
3. Be able to apply theories to the physical, social emotion and cognitive development of children.
4. Learn how theories can be applied to understanding children's behavior.
5. Demonstrate a basic knowledge of Early Childhood Education & the skills required to make objective observations of young children in the classroom setting.
6. Be able to systematically observe and record children's behavior.
7. Understand the different aspects of speech and communication.
8. Become acquainted with various communication impairments or delays and set realistic goals for young children in the area

- of language development.
9. Make an initial assessment of a child's language development.
10. Understand how a child's sensorimotor development influences a child's ability to learn.
11. Recognize possible signs of physical handicaps and developmental delays.
12. Be aware of the interrelationships between child development and the areas of health, safety and nutrition.
13. Be knowledgeable about the control and prevention of communicable diseases.
14. Provide general curriculum adaptations and guidelines to help children meet their special needs.
15. Gain the experience to create a supportive and interesting learning environment.
16. Be able to write goals, objectives and developmentally appropriate activities.
17. Develop a curriculum using a multisensory approach to teaching.
18. Plan, organize, execute and evaluate classroom activities on a weekly basis.
19. Write developmentally appropriate explorations prescription based upon a child's individual learning style.

Electronic Music and Audio Production

Liberal Arts and Behavioral/Social Sciences Division

The certificate in Electronic Music and Audio Production is designed for individuals who wish to learn, or enhance, their skills in the areas of electronic music composition and audio production. The certificate program will serve the specialized needs of students of Digital Arts and Fine Arts as well as individuals interested in electronic music composition and audio production. Students will be exposed to important historical aspects that have influenced compositional styles as well as the impact of technology on music and art.

Students must complete the following courses with a grade of "C" or better:

Course No.	Title	Credits
MUS*H101	Music History & Appreciation I	3
DAT/MUS*H218	Electronic Music Composition/ Audio Tech I	3
DAT/MUS*H237	Principles of Sound Recording *Directed Elective Arts/Digital Arts	3
		12
MUS*H126	20th Century/Modern Music	3
DAT/MUS*H219	Electronic Music Composition/ Audio Tech II	3
DAT*H220	Acoustics and Sound Design	3
		9
Total Credit Hours		21

*Directed Electives:

DAT*H110, DAT*H226, DAT*H290,
MUS*H103, MUS*H115

Program Outcomes

Upon successful completion of all program requirements, graduates will be able to:

1. Analyze and evaluate the properties of sound, human hearing, and sound reproduction systems.
2. Use principles of acoustics and psychoacoustics to design state-of-the-art sonic environments.
3. Apply industry-standard techniques and tools to complete two-track and multi-track recording projects.
4. Use digital signal processing tools to manipulate and shape sound.
5. Compose original electronic music compositions.

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Engineering Exploratory Certificate Science, Technology, Engineering & Mathematics Division

The Exploratory is designed to prepare students for Engineering Technology programs and enable them to evaluate career choices in Engineering Technologies.

Course No.	Title	Credits
TCN*H101	Introduction to Engineering Technology	3
MFG*H104	Manufacturing Processes	4
CAD*H150	CAD 2D or	
ARC*H133	Technical Drafting	3
EET*H104	Electrical CAD and Fabrication or	1
EET*H102	Electrical Applications†	3
Total Credit Hours		11-13

†EET*H102 can be taken instead of EET*H104 but may require additional math courses.

Program Outcomes

Upon successful completion of all program requirements, graduates will be able to:

1. Evaluate career choices in Engineering technologies.
2. Discuss the history of technology.
3. Meet with faculty in various Engineering Technologies.
4. Demonstrate proper setup and procedures for various manufacturing processes.
5. Use OrCAD Capture and Layout software.
6. Populate a double sided PC board.
7. Use drafting instruments.
8. Prepare a set of working drawings for a small machine assembly.
9. Differentiate between the various technologies used to complete a major engineering project.
- 10.

Family Child Care Provider*

Liberal Arts and Behavioral/Social Sciences Division

This certificate program is intended to define, evaluate, and recognize skills needed to offer competent care to young children in a family child care setting, as well as in various types of early childhood education programs. A family child care provider is a person who cares for up to six full-time children in their own home and must be licensed by the state of Connecticut. Upon completion of this certificate, students will possess the skills necessary to manage a well run program and meet the needs of infants, toddlers, and preschoolers.

Students who complete the first nine (9) credits of the certificate program also have the option of simultaneously applying for a Child Development Associate (CDA) Credential. These nine (9) credits will satisfy the 120 hours of training required for a CDA credential.

In addition, the credits earned with a grade of "C" or better in the certificate program can be applied toward an Associate of Science Degree in Early Childhood Education. All ECE courses are offered at Naugatuck Valley Community College in the evening for the convenience of those adults working in family homes or center-based settings.

Course No.	Title	Credits
ECE*H101	Introduction to Early Childhood Education	3
ECE*H103	Creative Experiences for Children	3

ECE*H176	Health, Safety & Nutrition	3
ECE*H206	Administration and Supervision of Early Childhood Programs	3
ECE*H290	Student Teaching I†	3
Total Credit Hours		15

†ECE*H290 Student Teaching I may be done in your home setting.

*Note: This certificate program is not accepting new students.

Program Outcomes

Upon successful completion of all program requirements, graduates will be able to:

1. Demonstrate a basic knowledge of Early Childhood Education and the skills required to make objective observations of young children in the home setting.
2. Systematically observe & record children's behavior.
3. Recognize that the process of creating is as important as the end product.
4. Use their own creative abilities in working with young children.
5. Demonstrate an understanding of the concept of creativity through planning environments and activities.
6. Be aware of the interrelationships between child development and the areas of health, safety and nutrition.
7. Be knowledgeable about the control and prevention of communicable diseases.
8. Provide general curriculum adaptations and guidelines to help children meet their special needs.
9. Gain the experience to create a supportive and interesting learning environment.
10. Write goals, objectives and developmentally appropriate activities.
11. Develop a curriculum using a multisensory approach to teaching.
12. Become familiar with CT State Licensing Regulations; C.D.A. Competency Standards & N.A.E.Y.C. Accreditation Procedures.

Finance

Business Division

The Finance Certificate is designed for individuals who are seeking professional development and advancement in the financial services area. Students entering this program are assumed to have a business foundation either by career or degree. Credits may be applied toward the degree program in Business Finance. Students must successfully complete the following credit courses with a grade of "C" or better.

Course No.	Title	Credits
CORE AREA	(Required)	
BFN*H201	Principles of Finance	3
ECN*250	Money and Banking	3
BFN*H220	Principles of Financial Management	3
BFN*H203	Investment Principles	3

One elective to be chosen from:

BRE*H205	Real Estate Law	3
BFN*H208	Financial Analysis	3
Total Credit Hours		15

Further information can be obtained by contacting the Chair of the Management Department.

Program Outcomes

Upon successful completion of all program requirements, graduates will be able to:

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1. Demonstrate knowledge of business finance including financial planning, long and short-term financing, fixed assets management, and management of long-term debt.
2. Identify strategies and practices in government and consumer financing.
3. Demonstrate knowledge of monetary, fiscal and debt management policies of government.
4. Demonstrate knowledge of basic analytical techniques, problem-solving and decision-making.
5. Identify the basic concepts of Asset Management and be able to provide an overview of Liability-and Deposit-Management as relates to the financial services industry.
6. Identify techniques for managing working capital and demonstrate knowledge of the capital budgeting process.
7. Provide an understanding of how the United States economic system is organized, how it functions and how it impacts the global economy.
8. Identify the major goals and functions of financial management.
9. Understand the principle components of financial analysis in all levels of the business organization.
10. Demonstrate an understanding of the interrelationships between Finance and all other areas within a business, including working with other departments to achieve overall strategic goals.

Fundamentals of Machine Technology

(formerly Machine Technology Level I)

Science, Technology, Engineering & Mathematics Division

The objective of the certificate program is to provide entry level skills and knowledge to individuals seeking a background in the machine technology profession. A prerequisite for entry into this certificate program is placement into or above both MAT*095 and ENG*063 or consent of the program director. This certificate provides entry level skills to those seeking positions in machine technology environments.

Course No.	Title	Credits
MFG*H124	Blueprint Reading I	2
MFG*H151	Mfg Machinery – Drill Press	1
MFG*H152	Mfg Machinery – Grinding	2
MFG*H153	Mfg Machinery – Bench Work	2
MFG*H154	Mfg Machinery – Lathe I	2
MFG*H155	Mfg Machinery – Milling I	2
MFG*H156	Mfg Machinery – CNC I	2
Directed Electives†		3
MFT H5234	Metrology (non-credit course)	
MFT H5235	Manufacturing Math I (non-credit course)	
MFT H5236	Career Awareness/Development/ Computer Application (non-credit course)	
Total Credit Hours		16

Directed Electives†:

CAD*H110	Introduction to CAD <i>or</i>
CAD*H150	CAD 2D <i>or</i>
QUA*H114	Principles of Quality Control

Gerontology

Liberal Arts and Behavioral/Social Sciences Division

Social services for the elderly are provided by many different kinds of agencies with different purposes, client groups, funding sources, and philosophies. The curriculum which leads to the certificate in Human Services, Gerontology Option is designed to provide an understanding of the behavior and needs of older persons.

Course No.	Title	Credits
HSE*H171	Death and Dying	3
HSE*H101	Introduction to Human Services	3

HSE*H170	Introduction to Gerontology	3
SOC*H101	Principles of Sociology	3
PSY*H111	General Psychology I	3
SOC*H201	Contemporary Social Issues	
or		
SOC*H221	Social Inequality	3
HSE*H202	Introduction to Counseling & Interviewing	3
Elective	Psychology elective	3
PSY*H258	Behavior Modification	3
HSE*H281	Human Services Field Work I	3
Total Credit Hours		30

Program Outcomes

Upon successful completion of all program requirements, graduates will be able to:

1. Be knowledgeable about the issues surrounding the universal prospect of death and about the mourning process.
2. Have a beginning understanding of a wide range of diagnoses that relate to people in need of social work service and be knowledgeable about the necessity of a collaborative relationship with area support systems.
3. Identify social and psychological aspects and processes of aging.
4. Locate local, state, and federal programs and services available for the solution of the problems of the elderly.
5. Explain what effects the social conditions in the United States have on the aging.
6. Understand sociocultural dynamics that underlay social issues in America today.
7. Provide elders the support and information necessary to build self-esteem and empowerment skills.
8. Demonstrate the ability to utilize the skills and tasks required for engagement, assessment, case planning, intervention and termination.

Graphics & Animation

Liberal Arts and Behavioral/Social Sciences Division

As a result of completing the Graphics & Animation Certificate, students will be able to design two-dimensional digital graphics, three-dimensional object modeling, digital animation sequences, and interactive media applications. Graduates will be qualified to seek positions in the fields of graphic art production, character animation, electronic publishing, broadcasting, and Web design.

Students must complete the following courses with a grade of "C" or better:

Course No.	Title	Credits
GRA*H150	Introduction to Graphic Design	3
DAT*H106	Digital Design	3
DAT*H108	Digital Imaging I	3
DAT*H212	3D Graphics & Animation I	3
		12
DAT*H116	Interactive Media Design	3
DAT*H230	Digital Imaging II	3
DAT*H234	3D Graphics & Animation II	3
		9
Total Credit Hours		21

Program Outcomes

Upon successful completion of all program requirements, graduates will be able to:

1. Design, edit and manipulate digital graphics and image files.
2. Utilize advanced techniques for character modeling and the design of virtual space.
3. Design, model, and animate complete 3-dimensional landscapes.
4. Develop state-of-the-art 3D special effects for film and video productions.
5. Complete significant projects terminating in deliverable

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software/media products with technical documentation.

Health Career Pathways

Allied Health, Nursing and Physical Education

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 for their program of interest.

Course No.	Title	Credits
HLT*H103	Investigations in Health Careers	3
ENG*H101	English Composition	3
MAT*H136	or 137	
	Intermediate Algebra	3
BIO*H105	or 115 or 121	
	Intro to Bio., Human Bio., Gen Bio I	4
CHE*H111	Concepts in Chemistry	4
PSY*H111	General Psychology I	3
BIO*H211	Anatomy & Physiology I	4
BIO*H212	Anatomy & Physiology II	4
Total Credit Hours		28

Please consult the catalog for prerequisites and eligibility to the courses.

Program Outcomes

Upon successful completion of all program requirements, the graduates will be able to:

1. Demonstrate competence in written and oral communication.
2. Demonstrate critical thinking, logical reasoning and problem solving skills.
3. Effectively utilize 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.

Horticulture

Science, Technology, Engineering & Mathematics Division

The Horticulture Certificate program is designed to develop the skills and understanding needed for students to take responsible positions in grounds maintenance, tree and shrub nurseries, wholesale plant growing, landscaping, garden centers and retail greenhouses, golf courses, lawn care, and parks/recreation departments. The certificate will be awarded on completion of all courses and a cooperative work experience.

Course No.	Title	Credits
HRT*H101	Landscape Construction	4
HRT*H102	Woody Plants	3
HRT*H103	Herbaceous Plants	3
HRT*H202	Landscape Design I†	3
HRT*H207	Landscape Maintenance	3
HRT*H222	Greenhouse Operations and Management	4
HRT*H290	CWE Horticulture Co-op	3
Elective	Horticulture††	3-4
Elective	Horticulture††	3-4
Total Credit Hours		29-31

†Prerequisite HRT*H102-Woody Plants or waiver by coordinator.

††Horticulture Electives

HRT*H105	Fruit and Vegetable Production
HRT*H115	Turf Management
HRT*H124	Floral Design I
HRT*H125	Floral Design II
HRT*H203	Landscape Design II
HRT*H204	Computers in Landscape Design
HRT*H206	Landscaping Small Properties
HRT*H219	Arboriculture
HRT*H224	Plant Propagation & Hybridization
HRT*H240	Nursery Management

Program Outcomes

Upon successful completion of all program requirements, graduates will be able to:

1. Identify common trees and shrubs, ground covers, various annuals, biennials, and perennials by botanical and common names, and describe the outstanding characteristics of each; summarize landscape, garden center and greenhouse uses; and know the cultural requirements of these plants.
2. Identify foliage plants commonly used indoors by botanical and common names, state distinguishing characteristics of each, and describe their use and culture in various indoor landscape areas.
3. Control the common weeds, insects, pests and diseases of ornamentals and turf.
4. Select the proper procedures, define the physiological basis, and describe practical applications of the reproduction of plants by asexual and sexual methods.
5. Describe proper design and operation of greenhouse environmental systems, and evaluate their advantages and disadvantages in commercial production.
6. Demonstrate a responsible attitude in relationships with employers, fellow employees, and toward the world of work.
7. Select appropriate techniques for the establishment and management of lawns and utility turf areas.
8. Manage the procedures used in landscape constructions and in the maintenance of small engines.
9. Design flower beds, and mixed borders; place trees and shrubs for a variety of gardens for both residential and commercial properties.
10. Access available resources to incorporate technological innovations.
11. Demonstrate those skills, abilities and values which allow a person to function as a free and responsible citizen.
12. Apply mathematics to calculating area, volume and application rates of fertilizers and pesticides.
13. Evaluate site conditions to design attractive, functional landscapes.

Landscape Design Certificate

Science, Technology, Engineering & Mathematics Division

The Horticulture Landscape Design Certificate is designed to prepare students for certification as Professional Landscape Designers. The certificate is designed to develop those skills in plant identification and culture, landscape mechanical skills, maintenance of landscapes, as well as hand drawing and sketching, computer aided designing portfolio assessments, leading to certification by the American Professional Landscape Designers. This program is affiliated with the Association of Professional Landscape Designers (APLD).

Course No.	Title	Credits
HRT*H101	Landscape Construction	4
HRT*H102	Woody Plants	3
HRT*H103	Herbaceous Plants	3
HRT*H202	Landscape Design I	3
HRT*H203	Landscape Design II	3
HRT*H204	Computers in Landscape Design	3
HRT*H206	Landscaping Small Properties	3
HRT*H207	Landscape Maintenance	3
Art*H111	Drawing I	3

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HRT*H290	or CWE/Horticulture Co-op	3
Total Credit Hours		28

Program Outcomes

Upon successful completion of all program requirements, graduates will be able to:

1. Identify the current repertoire of trees, shrubs, ground covers, vines, annuals, biennials, and perennials by botanical and common names, describe the outstanding characteristics of each; summarize landscape uses, know their cultural requirements; design herbaceous and mixed borders.
2. Evaluate landscape areas and needs; select and place plants in a design; design and place hardscape features in a landscape; draw plans using traditional equipment and computer-aided tools; outline techniques for low maintenance needs in both residential and commercial properties.
3. Transfer portions of aerial designs into perceptual designs, using sketching techniques; develop a plan for pricing out landscape projects and bids; demonstrate oral skills to clients on design ideas; design landscape garden plans using computer design programs; manipulate computer designs to illustrate to landscape design development over time.
4. Demonstrate how to bring color to the landscape through the four seasons with herbaceous and woody plants; how to establish and manage mass planting through the year.
5. Demonstrate and explain how to prune deciduous and evergreen trees and shrubs for a variety of purposes.
6. Interpret fertilizer needs for particular plants from the general recommendations of a soil analysis; recognize signs of nutrient deficiency.
7. Demonstrate techniques for designing small properties; plan and select plants for different kinds of gardens (examples: for woods, meadows, marshes, water, rock gardens).
8. Relate the historical development of the garden through the ages and be able to recognize the contributions and influences of great designers on gardens today.
9. Relate and demonstrate how to use all the subtleties of color and design in the garden in two dimensional and three dimensional formats.
10. Initiate, develop and present a significant design as an independent study project.
11. Demonstrate a responsible attitude in relationships with employers, fellow employees, and toward the world of work.
12. Access available resources to incorporate technological innovations.
13. Be prepared for certification as a Professional Landscape Designer.
14. Initiate landscape design through computer-aided programs.

Lean Manufacturing Certificate Program Science, Technology, Engineering & Mathematics Division

The Lean Manufacturing Certificate was developed as a response to the expressed future and current needs of the manufacturing community. The U.S. Department of Labor along with local industry has demonstrated a demand and need for courses in the areas of lean management. This certificate provides students with the skills that will increase their employability in the manufacturing field as well as set them on a path that will enable them to further their education.

Course No.	Title	Credits
MFG* H171	Introduction to Lean Manufacturing	3
MFG* H271	Advanced Lean Manufacturing	3
Total Credit Hours		6

Legal Studies/Paralegal Business Division

The Legal Studies/Paralegal certificate program is designed to develop and enhance the skills and understanding needed to fill responsible positions in banks, insurance companies, real estate companies, private law offices, corporate law offices, and local, state and federal government legal departments. The Legal Studies/Paralegal Certificate program is a member of the American Association for Paralegal Education. See admission requirements to the Legal Studies/Paralegal Certificate Program below.

The topic of ethics and the paralegal's role in the legal profession are emphasized throughout the courses in the program.

Eight courses are required for completion of the Legal Studies/Paralegal Certificate Program. The certificate will be awarded on completion of the following courses:

Course No.	Title	Credits
LGL*H101	Introduction to Paralegalism	3
LGL*H102	Legal Research and Writing	3
LGL*H104	Real Estate Practice	3
LGL*H202	Advanced Legal Research and Writing	3
LGL*H209	Probate Practice & Estate Administration	3
LGL*H208	Litigation	3

Choose two of the following:

LGL*H270	Cooperative Education Work Experience	3
LGL*H210	Family Law	3
LGL*H204	Criminal Procedure	3
LGL*H230	Advanced Legal Issues Seminar	3
LGL*H206	Bankruptcy Law	3
Total Credit Hours		24

Program Outcomes

Upon successful completion of all program requirements, graduates will be able to:

1. Interview client(s) and condense fact patterns into a concise legal analysis.
2. Explain the structure of the State and Federal Court system, including Trial Court function(s) and Appellate Court functions.
3. Identify historical, sociological and political trends that have changed, and continue to change, the American legal system.
4. Explain the role of forensic science in evidentiary matters pertaining to civil and criminal litigation.
5. Research a particular fact pattern to identify all legal issues, and describe the competing arguments that can be advanced by parties to a controversy.
6. Explain the role of the judiciary in providing a balance to the legislative and executive functions of government.
7. Differentiate between liability issues and damage issues in legal controversies.
8. Identify inherent restrictions in the civil and criminal legal process that inhibit the ability of the legal system to function as a tool of social justice.
9. Identify and present a logical plan for a client taking into account the strengths and weaknesses of adopting various legal positions.
10. Maintain organized financial data concerning a client's case file.
11. Foster good relations between the law firm, department, or public entity and the clients served.
12. Demonstrate organization in handling multiple client case files and maintain strict docket control for timely case file review.
13. Understand conflict resolution as viewed from the theoretical perspective and the pragmatic perspective.
14. Apply common law principles and statutory principles where appropriate.
15. Recognize fundamental tort and contract principles that are found in different areas of the law.

Management: Business

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Business Division

The Management Certificate Program is intended to provide students with a broad background in the field of management. Students completing this certificate program will be qualified to accept entry-level positions in a variety of profit and non-profit fields.

Course No.	Title	Credits
CORE AREA: (Required)		
BBG*H101	Introduction to Business	3
BMG*H202	Principles of Management	3
BMG*H105	Supervision and Organizational Behavior	3
ACC*H113	Principles of Financial Accounting	3
Elect three of the following, totaling 9 credits:		
BMG*H220	Human Resources Management	
BBG*H210	Business Communication	
BBG*H231	Business Law I	
BMK*H201	Principles of Marketing	
BMG*H105	Supervision and Organizational Behavior	
ACC*H117	Principles of Managerial Accounting	
		9
Total Credit Hours		21

Program Outcomes

Upon successful completion of all program requirements, graduates will be able to:

1. Demonstrate basic knowledge of management, human resources, and organizational development in an entry level management position.
2. Identify the skills needed to organize thoughts and ideas, and demonstrate the ability to communicate, verbally and in writing, in a manner that can be easily understood in the business environment.
3. Solve math problems related to various aspects of management including accounting, finance and operations.
4. Understand and practice the various functions of management as well as the nature and responsibilities of a manager.
5. Develop an understanding of the decision-making process and demonstrate effective decision-making.
6. Demonstrate an ability to define management problems, examine alternatives and decide on the best course of action, and submit these in writing to higher management.
7. Develop a personal philosophy of management, enabling him/her to perform as a manager, staff specialist or as a subordinate.
8. Develop an understanding of the nature of change and how to adapt to the accelerating, global environment.
9. Demonstrate a knowledge and use of technological innovations as they apply to management.
10. Develop an ability to interpret management information from various sources such as financial statements, annual reports, and publications.
11. Demonstrate an understanding of the competitive pressures brought by effectiveness, efficiency and innovation issues on organizations.
12. Demonstrate a responsible attitude in relationships with employers, fellow employees, working groups, and the macro environment.

Management Information Systems (MIS)

Business Division

This certificate program will prepare students for applications and system programming positions within a business environment. Courses are designed to offer students immediate positions in industry, and will also provide a solid foundation for continuation in our two year associate's degree in Computer Information Systems Technology.

Two Required Courses (6 credits)

Course No.	Title	Credits
CSC*H205	Visual Basic I	3
or		
CSC*H113	Programming I	
CSC*H231	Database Design I	3
Four Elective Courses (12 credits) selected from this list		
CSC*H101	Introduction to Computers	3
CSC*H183	Information Systems in Organizations	3
CSC*H205	Visual Basic I	e
or		
CSC*H113	Programming I (if both are taken, one can be used to meet the 4 elective requirement)	
CSC*H206	Visual Basic II	3
CSC*H211	VB & ASP .NET Web Programming	3
CSC*H227	Web Programming with Java	3
CSC*H228	Mobile Device Programming	3
CSC*H229	Programming II	3
CSC*H250	Systems Analysis and Design	3
CSC*H252	Information Systems Project Management	3
CSC*H237	Database Programming with VB .NET	3
CST*H130	Networking Essentials I	3
Total Credit Hours		18

Program Outcomes

Upon successful completion of all program requirements, graduates will be able to:

1. Acquire a familiarization with terminology and structure of various programming languages.
2. Demonstrate the ability to use software tools for program development.
3. Write, compile and run effective business applications.
4. Troubleshoot common programming problems and test solutions.
5. Demonstrate a basic understanding of relational database concepts.

Manufacturing*

Science, Technology, Engineering & Mathematics Division

The certificate program in Manufacturing is designed to prepare individuals for "hands-on" entry-level positions in the manufacturing sector, i.e., inspectors, machine operators, CNC operators or progress planners. The certificate holder will possess enough fundamental knowledge in basic math, blueprint reading and manufacturing processes to function on the shop floor at the entry level as compared to our associate degree program in Automated Manufacturing Engineering Technology, where the graduate is more concerned with the "technical" engineering concepts of manufacturing.

The student presently seeking an entry-level "hands-on" job in industry would benefit most from this program. Persons presently in the work force could also benefit by improving their skills in manufacturing. Once employed, individuals could continue their education at the associate degree level. With a combination of work experience and education, employees could advance to more responsible positions in the manufacturing field. A student who does not live within easy commuting distance of a community-technical college offering an associate degree program in Manufacturing, but does live near another community-technical college would also benefit by being allowed to complete the majority of courses at a local institution. Fifty percent of the courses would be transferable to community-technical colleges offering associate degrees in Manufacturing, Mechanical or CAD/D Engineering Technology.

Course No.	Title	Credits
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MFG*H104	Manufacturing Processes	4
CAD*H150	CAD 2D	3
TCN*H101	Introduction to Engineering Technology	3
MAT*H137	Intermediate Algebra	3
MFG*H106	Computer-Aided Manufacturing I	3
MFG*H120	Metrology	3
MFG*H230	Statistical Process Control	3
	Total Credit Hours	22

*Note: This certificate program is not accepting new students.

Program Outcomes

Upon successful completion of all program requirements, graduates will be able to:

1. Demonstrate fundamental knowledge in basic math, blueprint reading, and manufacturing processes.
2. Demonstrate proficiency in basic manufacturing analysis and problem-solving.
3. Understand product variation concepts and utilization of statistical process control. Program NC machines using manual data input mode.
4. Apply knowledge of computer applications including word-processing and spreadsheets.

Marketing Electronic Commerce

Business Division

The world of Marketing is undergoing great change driven by the "Internet—Electronic Marketplace." The Internet is fast becoming the ultimate distribution system to disseminate marketing data, identify customers and provide salesforce attention, customer service activity, and ordering. This short-term certificate is designed to provide you with the basic electronic commerce skills to effectively prepare and execute electronic commerce "Marketing Plans." The critical skill areas emphasized are: the understanding of marketing, customer service capabilities, sales skills, computer expertise in electronic commerce, verbal and written communications abilities, and logical analysis problem-solving.

Course No.	Title	Credits
BMK*H220	Sales	3
BMK*H201	Principles of Marketing	3
BMK*H207	Consumer Behavior	3
BMK*H216	Internet Marketing†	3
CSA*H207	Computer Applications in Management and Marketing†	3
	Total Credit Hours	15

†A proficiency in computer skills is required and encompasses Windows, electronic spreadsheet, database applications and the Internet. This can be satisfied by work experience in these programs, a Web Page Design Certificate, a Webmaster Certificate, successful completion of CSA*H105, Introduction to Software Applications (or similar course), or permission of the Chair of the Management Department or Division Director.

Program Outcomes

Upon successful completion of all program requirements, graduates will be able to:

1. Identify and develop solutions to meet customers' needs via the world wide web and electronic commerce.
2. Apply the concepts of "Total Quality Management" and "Total Customer Service" to electronic commerce.
3. Prepare marketing material to be disseminated via electronic modalities to include: literature, proposals, point-of-sale literature, and promotion plans for the consumer, trade and sales force.
4. Possess the following computer skills: database management, wordprocessing, internet marketing, desktop publishing, and sales and customer service system configuration/operations.

Modern Manufacturing Design Certificate

Science, Technology, Engineering & Mathematics Division

The Modern Manufacturing Design Certificate is designed for students seeking employment and advancement in support positions in a variety of manufacturing disciplines which require CAD, manufacturing, and mathematics skills. The credit hour requirement for this certificate facilitates completion within one year, and therefore meets the Workforce Investment Act criteria for training programs.

Course No.	Title	Credits
CAD*H150	CAD 2D	3
MFG*H104	Manufacturing Processes	4
TCN*H101	Introduction to Engineering Technology	3
CAD*H220	Parametric Design	3
MFG*H120	Metrology	3
MAT*H135	Topics in Contemporary Mathematics (or higher level Mathematics course)	3
	Total Credit Hours	19

Program Outcomes

Upon successful completion of all the program requirements, graduates will be able to:

1. Demonstrate basic knowledge and understanding of engineering graphics and conventional 2-dimensional drafting practices such as orthographic and isometric projection, section, detail, auxiliary views, and geometric dimensioning and tolerancing.
2. Demonstrate proficiency in the use of Cad software for 2-dimensional applications.
3. Explain concepts and skills required for manufacturing processes.
4. Demonstrate proper setup and procedures for various manufacturing processes.
5. To demonstrate the ability to use appropriate mathematical and computational skills needed for entry-level work in manufacturing.
6. To combine oral, graphical, and written communication skills to present and exchange information effectively and to direct manufacturing activities.

Multimedia/Web Authoring

Liberal Arts and Behavioral/Social Sciences Division

The certificate in Multimedia/Web Authoring is designed for individuals who have already earned advanced degrees, are currently employed in interactive multimedia/Web design professions, and are looking for skill-enhancement opportunities. Students entering this certificate program should already have a foundation in the core components of multimedia design and development attained through career performance or degree acquisition. If the individual does not possess either a degree or experience, he/she should consider enrolling in the Digital Arts/Multimedia Authoring degree option. Certificate credits may also be applied toward related degree programs.

Course No.	Title	Credits
DAT*H104	Multimedia Authoring I	3
DAT*H106	Digital Design	3
DAT*H116	Interactive Media Design	3
DAT*H205	Multimedia Authoring II	3
DAT*H215	Multimedia/Web Authoring	3
DAT*H240	Multimedia Authoring III	3
	Total Credit Hours	18

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Program Outcomes

Upon successful completion of all program requirements graduates will be able to:

1. Utilize current development methods to design advanced multimedia systems.
2. Utilize the phases of the project development life-cycle to assist in the design and completion of multimedia project applications.
3. Conduct a user-needs assessment for the development of multimedia systems.
4. Design and implement accessibility-compliant user interfaces.
5. Design interactive application technologies for the World Wide Web.
6. Complete significant projects terminating in deliverable software products with technical documentation.

Object-Oriented Programming

Business Division

This certificate program recognizes the need to educate students in the area of object-oriented programming and systems design. Students will take courses in the area of Object-Oriented Systems (OOS). Programming languages include C++, VISUAL BASIC, and JAVA. An introduction to client/server systems applications is also included in this certificate program. Courses are designed to offer students immediate positions in industry, and will also provide a solid foundation for continuation in our two-year associate's degree in Computer Information Systems Technology.

Two Required Courses (6 credits)

Course No.	Title	Credits
CSC*H205	Visual Basic I	3
	or	
CSC*H113	Programming I	3
CSC*H231	Database Design I	3

Four Elective Courses (12 credits) from this list

CSC*H101	Introduction to Computers	3
CSC*H205	Visual Basic I	e
	or	
CSC*H113	Programming I (if both are taken, one can be used to meet the 4 elective requirement)	
CSC*H206	Visual Basic II	3
CSC*H211	VB & ASP .NET Web Programming	3
CSC*H213	Object Oriented Programming Using C++	3
CSC*H214	Advanced C++ Programming	3
CSC*H220	Object Oriented Programming Using Java	3
CSC*H227	Web Programming with Java	3
CSC*H228	Mobile Device Programming	3
CSC*H229	Programming II	3
CSC*H237	Database Programming with VB .NET	3

Total Credit Hours **18**

Program Outcomes

Upon successful completion of all program requirements, graduates will be able to:

1. Demonstrate the use of objects in application programs.
2. Define and implement efficient object-oriented solutions using C++, JAVA, and Visual Basic.
3. Write, compile, and execute programs using C++, JAVA, and Visual Basic programming languages.
4. Create applications using object-oriented features.
5. Use inheritance and interfaces to create robust, reusable, programming code.
6. Demonstrate a basic understanding of relational database concepts.

Supply Chain Management

Science, Technology, Engineering & Mathematics Division

The Supply Chain Management Certificate was developed as a response to the expressed future and current needs of the manufacturing community. The U.S. Department of Labor along with local industry has demonstrated a demand and need for courses in supply chain management. This certificate provides students with the skills that will increase their employability in the manufacturing field as well as set them on a path that will enable them to further their education.

Course No.	Title	Credits
MFG* H172	Intro to Lean Supply Chain Mgmt.	3
MFG* H272	Implementing Lean Supply Chain Mgmt.	3
	Total Credit Hours	6

Technical Communications

Liberal Arts and Behavioral/Social Sciences Division

The certificate in Technical Communications prepares and empowers the student to be an effective communicator with the ability to write and speak about technical subjects to co-workers, management and customers. At almost every level of employment, business and industry are seeking employees who can communicate technical information to others. Most jobs call for writing skills to prepare correspondence, instructions, charts, graphs and proposals in order to explain, illustrate and convince. Workers also need to speak well enough to explain procedures, communicate with customers and to teach others.

This certificate is focused on working adults who have a desire to improve their technical communications skills. A unique feature is the five-course duration allowing the student to complete the program in a few semesters. Courses carry college credit and are offered in the evening for the convenience of working students. The following courses comprise the certificate in Technical Communications:

Course No.	Title	Credits
COM*H100	Introduction to Communication	3
ENG*H101	Composition	3
CSA*H105	Introduction to Software Applications	3
ENG*H202	Technical Writing	3
DAT*H101	Introduction to Digital Arts	
	or	
GRA*H150	Introduction to Graphic Design	3
	Total Credit Hours	15

To ensure the applicant's appropriate placement within the program, reading and writing competencies will be assessed. Applicants in need of improvement will be advised to enroll in the College's academic skills and/or basic writing courses.

Program Outcomes

Upon successful completion of all program requirements, graduates will be able to:

1. Demonstrate increased competencies in writing and speaking skills.
2. Effectively articulate technical procedures to co-workers, management, and customers.
3. Utilize current computer software, audio, and video tools in preparing technical presentations.

CERTIFICATES, CREDIT PROGRAMS

Visual Art

Liberal Arts and Behavioral/Social Sciences Division

The Arts certificate program in Visual Art is a generalized program of primarily two-dimensional studio art and art appreciation courses for the student who wishes to begin college-level credited art courses or to continue such study. Not all courses are offered in all semesters.

Course No.	Title	Credits
ART*H111	Drawing I	3
ART*H151	Painting I	3
ART*H101	Art History I	
	or	
ART*H102	Art History II	3
ART*H112	Drawing II	3
ART*H152	Painting II	3
ART*H121	Two-Dimensional Design	3
ART*H131	Sculpture I	3
Electives	Art	6
	Total Credit Hours	27

Program Outcomes

Upon successful completion of all program requirements, graduates will be able to:

1. Demonstrate mastery of skills and techniques necessary for studio art.
2. Assemble a comprehensive portfolio of artwork.

CERTIFICATES, CREDIT PROGRAMS



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Lifelong Learning, Non-credit Certificates and Programs

The college offers a variety of non-credit lifelong learning activities to meet the career and professional development needs of our communities. Our programs serve the specialized needs of the people and industries in the State of Connecticut.

Classes are offered days, evenings, and weekends at our main campus in Waterbury and at the Danbury Campus, 190 Main Street, Danbury. At Naugatuck Valley Community College you can find classes to improve your computer skills, prepare for a new career, earn a required license or certification, or master the art of riding a motorcycle safely.

Our staff in the Office of Non-credit Lifelong Learning is available to answer your questions and provide additional program information.

Non-Credit Lifelong Learning
(203) 575-8029
continuinged@nv.edu

Career and Workforce Development Programs

The Center for Business and Industry Training (CBIT)

CBIT offers a wide selection of certification preparation courses, pre-licensing examination preparation courses, and short courses in Business, Computers, Hospitality, Manufacturing, Security Officer, Welding and more.

The Center for Health Careers and Community Education (HCCA)

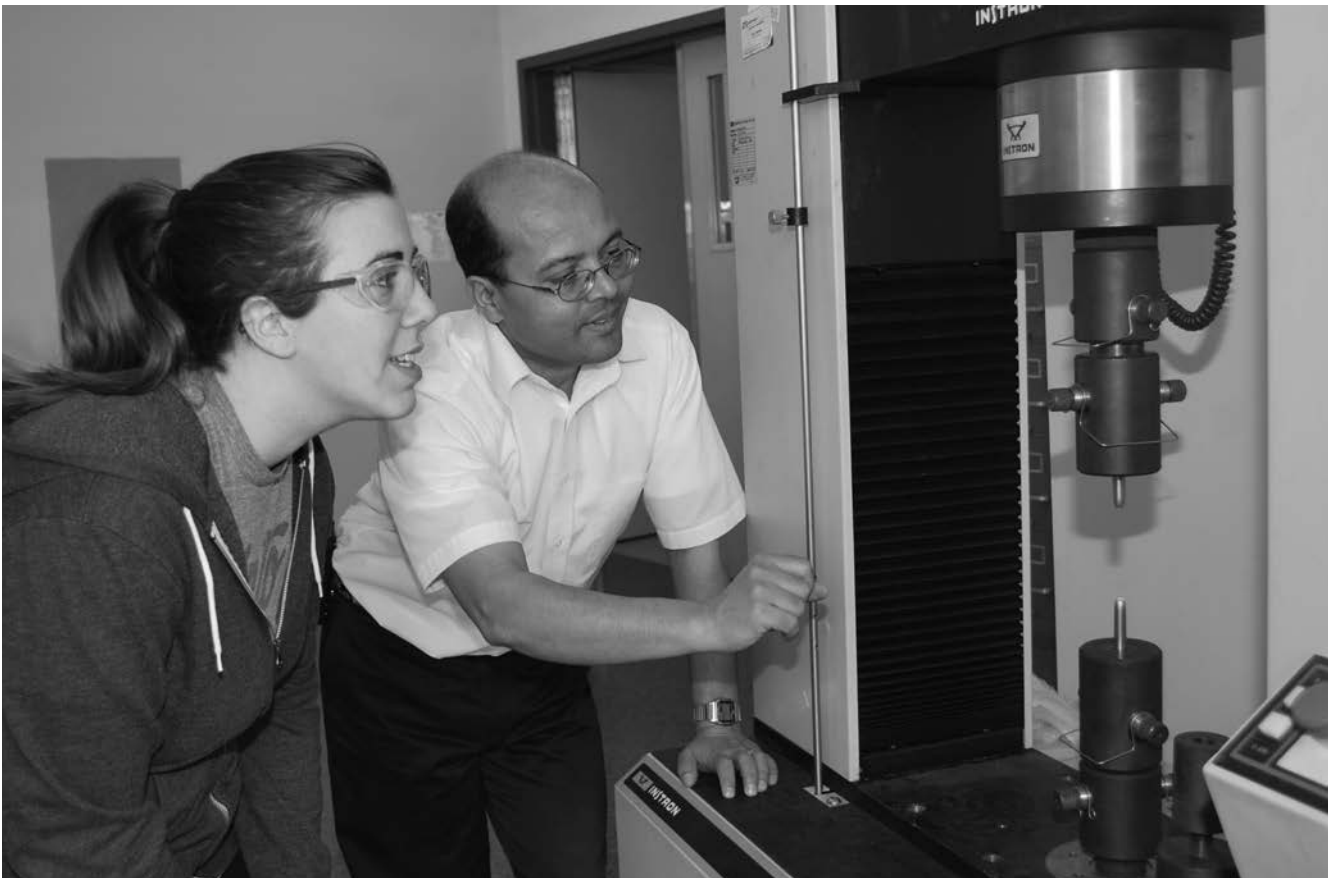
HCCA provides entry-level job training opportunities for individuals beginning their career in health care.

Customized Training

Companies who want their employees to achieve specific objectives contract for programs tailor designed and conducted at their company site, or on campus. We provide individually customized training and assessment that focus on the needs of business, industry, healthcare, government, and professional associations in the areas of training and testing that address skills to improve job performance and productivity including: technical skills, management and supervision, employability skills, workplace literacy, and English-as-a-Second Language.



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160 COURSE DESIGNATION**COURSE PREFIX****DIVISION**

Accounting	ACC*H	Business
American Sign Language	ASL*H	Liberal Arts and Behavioral/Social Sciences
Anthropology	ANT*H	Liberal Arts and Behavioral/Social Sciences
Art	ART*H, GRA*H	Liberal Arts and Behavioral/Social Sciences
Astronomy	AST*H	Science, Technology, Engineering & Mathematics
Automotive Technician	ATP*H	Business
Aviation Science	AVS*H	Business
Biological Sciences	BIO*H	Science, Technology, Engineering & Mathematics
Business	BBG*H, BES*H, BMK*H, BMG*H	Business
Business Finance	BFN*H, BRE*H	Business
Chemistry	CHE*H	Science, Technology, Engineering & Mathematics
Communications	COM*H	Liberal Arts and Behavioral/Social Sciences
Computer-Aided Drafting/Design	CAD-H, CAD*H	Science, Technology, Engineering & Mathematics
Computer Information Systems	CSC*H, CST*H	Business
Computer Science	CSA*H	Business
Cooperative Education	CWE-H	Student Services
Criminal Justice/Public Safety	CJS*H	Liberal Arts and Behavioral/Social Sciences
Dance	DAN*H	Liberal Arts and Behavioral/Social Sciences
Digital Arts Technology	DAT*H	Liberal Arts and Behavioral/Social Sciences
Drug and Alcohol Recovery Counselor	DAR*H	Liberal Arts and Behavioral/Social Sciences
Early Childhood Education	ECE*H	Liberal Arts and Behavioral/Social Sciences
Economics	ECN*H	Business
Electronic Engineering Technology	EET*H	Science, Technology, Engineering & Mathematics
EMT-Basic	EMT*H	Allied Health/Nursing/Phys. Ed.
Engineering Technology	TCN*H	Science, Technology, Engineering & Mathematics
English	ENG*H	Liberal Arts and Behavioral/Social Sciences
English as a Second Language	ESL*H	Liberal Arts and Behavioral/Social Sciences
Environmental Science	ENV*H	Science, Technology, Engineering & Mathematics
Fire Technology and Administration	FTA*H	Business
Geography	GEO*H	Liberal Arts and Behavioral/Social Sciences
Geology	GLG*H	Science, Technology, Engineering & Mathematics
Health	HLT*H	Allied Health/Nursing/Phys. Ed.
History	HIS*H	Liberal Arts and Behavioral/Social Sciences
Honors	HON-H	Academic Affairs
Horticulture	HRT*H	Science, Technology, Engineering & Mathematics
Hospitality Mgt. (<i>Foodservice Mgt and Hotel Mgt</i>)	HSP*H	Business
Human Services	HSE*H	Liberal Arts and Behavioral/Social Sciences
Humanities	HUM*H	Liberal Arts and Behavioral/Social Sciences
Interdisciplinary Studies	IDS-H	Liberal Arts and Behavioral/Social Sciences
Languages	CHI*H, FRE*H, GER*H, ITA*H, POR*H, ASL*H, SPA*H	Liberal Arts and Behavioral/Social Sciences
Latino American Studies	LAS*H	Liberal Arts and Behavioral/Social Sciences
Legal Assistant/Paralegal	LGL*H	Business
Management	BES*H, BMG*H	Business
Manufacturing	MFG-H, MFG*H	Science, Technology, Engineering & Mathematics
Marketing	BMK*H	Business
Mathematics	MAT*H	Science, Technology, Engineering & Mathematics
Mechanical Engineering Technology	MEC*H	Science, Technology, Engineering & Mathematics
Meteorology	MET*H	Science, Technology, Engineering & Mathematics
Music	MUS*H	Liberal Arts and Behavioral/Social Sciences
Nursing	NSG*H, NUR*H, HLT*H	Allied Health/Nursing/Phys. Ed.
Philosophy	PHL*H	Liberal Arts and Behavioral/Social Sciences
Physical Education	HPE*H	Allied Health/Nursing/Phys. Ed.
Physical Therapist Assistant	PTA*H	Allied Health/Nursing/Phys. Ed.
Physics	PHY*H	Science, Technology, Engineering & Mathematics
Political Science	POL*H	Liberal Arts and Behavioral/Social Sciences
Psychology	PSY*H	Liberal Arts and Behavioral/Social Sciences
Quality Assurance	QUA*H	Science, Technology, Engineering & Mathematics
Radiologic Technology	RAD*H	Allied Health/Nursing/Phys. Ed.
Respiratory Care	RSP*H	Allied Health/Nursing/Phys. Ed.
Sociology	SOC*H	Liberal Arts and Behavioral/Social Sciences
Theater	THR*H	Liberal Arts and Behavioral/Social Sciences

COURSE DESCRIPTIONS

The following are descriptions of courses offered by Naugatuck Valley Community College. It is the responsibility of the students to check their programs of study, and to carefully check the schedule of course offerings prior to each semester, in order to ascertain which courses will be offered for a particular semester.

In the following course descriptions, the number of credit hours for each course is indicated. Also included are numbers of lab and lecture hours. Students are urged to consult their counselor for information about transferability of courses to four-year institutions.

WAIVER OF COURSE PREREQUISITES

In certain circumstances, course prerequisites may be waived. The student must demonstrate to the program coordinator and/or division director that he/she has mastered the basic concepts of the prerequisite course. Permission to waive a prerequisite should not be taken for granted. Waivers are NOT automatic and will be handled and granted on an individual basis.

Note: All courses listed in this catalog may not be offered during the current academic year.

CREDIT COURSES WHICH DO NOT APPLY TO ELECTIVES OR DEGREES

The following courses do not satisfy the elective or degree requirements in any program except where specifically listed.

CWE-H100 - Portfolio Preparation
 EET*H295
 ENG*H043, 053, 063
 ESL 012, 013, 015, 017, 022, 025
 HLT*H093
 MAT*H092, 094, 095

HELPFUL DEFINITIONS WHEN SELECTING YOUR PROGRAM AND COURSES

1. Credit Hours (credits) - College work is measured in units called credit hours. A credit-hour value is assigned to each course and is normally equal to the number of hours the course meets each week. Credit hours may also be referred to as semester hours.

2. Lecture Hours (lec.) - The number of clock hours in the fall or spring semester the student spends each week in the classroom. This time frame is different for the shorter summer sessions.

3. Laboratory Hours (lab.) - The number of clock hours in the fall or spring semester the student spends each week in the laboratory or other learning environment. This time frame is different for the shorter summer sessions.

4. Prerequisite - A course that must be successfully completed, or a requirement such as related life experiences that must be met before enrolling in another course.

5. Corequisite - A course that must be taken during the same or earlier semester as the course in which one is enrolling.

6. General Education Core - A term which refers to courses as listed under the 11 competencies of Naugatuck Valley Community College's General Education Core which the faculty of the College considers essential to its degree programs. Refer to pages 50-55.

7. Electives - Courses which may be chosen from items 8, 9, or 10.

8. Liberal Arts Electives - All courses listed in the general education core.

9. General Electives - All courses listed in the catalog. Students who have taken restricted courses may apply the courses as general electives if they change programs. Students should consider transferability of courses when choosing general electives.

10. Directed Electives - Credit courses that satisfy specific program requirements. These courses are listed with each program area.

11. Language Equivalencies - The following equivalencies satisfy the modern language requirements:

- Three years of high school work in a single foreign language, ancient or modern, or
- Two years of high school work and an added semester of a college course at a more advanced level in a single foreign language, or
- Two semesters of a single foreign language in college.

Note: Students may also take CLEP (College Level Examination Program) to satisfy the modern language requirements. Information on these tests is available from the Testing Center.

This College continues to add and adjust courses, course designations, and course numbers to its offerings. The general education core and the definitions will be adjusted accordingly.

SELF-PACED COURSES

Some of the courses listed in the description are offered as "self-paced" which means that they are conducted in an alternate way to the regular class scheduled meetings. These courses are offered through the standard text books, and specially prepared materials, and/or video/audio tapes. Students are guided through the courses by a relevant member of the faculty. Students should be aware that self discipline is required for the successful completion of self-paced courses. Permission from a counselor, the relevant faculty member or Division Director is required before students register for self-paced courses. The student may register at any time. The course must be completed by the end of the succeeding semester.

INDEPENDENT STUDY Independent study courses may not be taken if the course is being offered in the same semester.

Policy Changes

Naugatuck Valley Community College reserves the right to change requirements, courses, prerequisites, regulations, tuition, fees and other policies without prior notice. The President of the College upon written request may make waivers of these policies, due to extenuating circumstances. The catalog does not constitute a contract and is for informational use only.

ACCOUNTING Business Division

ACC*H113 Principles of Financial Accounting 3 credits
*Prerequisites: ACC*H113 is a rigorous college level course. Students should have completed all developmental course work.* The course offers an introduction to financial accounting with an emphasis on the use and interpretation of financial accounting information. It introduces the student to the balance sheet, income statement, statement of retained earnings, the cash flow statement and the operation of an accounting information system. The course focuses on the fundamental theory and principles of accounting, and utilizes accounting procedures to clarify and demonstrate the underlying concepts. The computer is used in this course.

ACC*H117 Principles of Managerial Accounting 3 credits
*Prerequisite: ACC*H113.* The major objectives of this course are to introduce management tools and models that use accounting information. The use of accounting information for planning, controlling, and decision-making is explored in topics including cost behavior, budgeting and cost accounting. The analysis and interpretation of information are stressed in this rigorous one semester management accounting course. The computer is used in this course.

ACC*H123 Accounting Software Applications 3 credits
*Prerequisites: Grade of "C" or better in ACC*H113, CSA*H105, and MAT*H137. Corequisite: ACC*H117.* Recognizing the importance of computer skills in accounting, this course is designed to acquaint the student with techniques and procedures in using microcomputers as a problem-solving tool in accounting and related disciplines. A PC accounting package and a computerized spreadsheet package will be used in the course. The course will be appropriately rigorous, and the spreadsheet usage will be centered around problems typical of a second semester accounting course.

ACC*H241 Federal Taxes I 3 credits
 The Federal Income Tax course is a one-semester study of the Internal Revenue Code as it pertains to individuals. Its purpose is to introduce the student to the federal income tax laws and the application of those laws to the preparation of tax returns.

ACC*H271 Intermediate Accounting I 3 credits
*Prerequisite: Grade of "C" or better in ACC*H117.* This course is designed to develop a high level of technical competence. Beginning with basic accounting issues, the course develops students' skills to the point at which they can handle complex professional level problems requiring not only a knowledge of procedures, but also a keen awareness of the concepts behind them. Consideration is given to analysis and interpretation of financial data.

ACC*H272 Intermediate Accounting II 3 credits
*Prerequisite: Grade of "C" or better in ACC*H117. ACC*H272 is a continuation of the studies begun in CCT-H201.* Particular emphasis is on the topics involving financial statement reporting and disclosure. Subjects covered in depth include current and long-term liabilities, long term investments, the accounting for corporate capital, retained earnings and dividends, the preparation of the Cash Flow Statement, and Income Tax Accounting.

ANTHROPOLOGY Liberal Arts and Behavioral/Social Sciences Division

ANT*H101 Introduction to Anthropology 3 credits
*Prerequisite: Eligibility for ENG*H101.* This course is an introduction to physical and cultural anthropology. Topics include a study of genetics and evolution, the origins of man and the development of culture, human variation and race, archaeology, language and communication, marriage and family patterns, kinship and descent, religion, the arts, economic and political organization, personality and culture, and cultural change.

ANT*H121 Introduction to Archaeology 3 credits
 Archaeology is the study of past cultures and societies through examination of their material remains. The class will explore different varieties of archaeology and examine theory, methods, and techniques for investigating, reconstructing, interpreting, preserving, and ultimately, learning from the past. Students will then briefly review human cultural chronology from the time of the first people, the earliest Paleolithic ages, to the present, and deal with not only the artifact remains but also important social, economic, and even ideological questions, such as those on the origins of food production, social inequality, and civilization. Two major emphases throughout the course are archaeology as anthropology and the relevance of archaeology to modern human society and politics. The class will also examine discoveries that make the news during the semester.

ANT*H205 Cultural Anthropology 3 credits
 This course is an examination of the concept of culture as the central mode through which humans become people. Students will examine the concept of culture vs. instinct, human cultural adaptation and variation, along with cultural universals, language and communication, marriage and family patterns, kinship and descent, religion, the arts, economic and political organization, personality and culture, and cultural change.

ART Liberal Arts and Behavioral/Social Sciences Division

The Division of Liberal Arts and Behavioral/Social Sciences encourages students to register for Art courses in order to develop appreciation of, and skills in, the Arts. Some of the courses are required in career programs; others are designed for students' interests and personal development. Consultation with counselors will help determine specific needs. For information, contact the Division of Liberal Arts and Behavioral/Social Sciences at 575-8036.

ART*H101 Art History I 3 credits
 This course is a survey of Western art and architecture from prehistory to the gothic period through an historical, cultural, and technological perspective. The class will include lectures, video and slide presentations For the art major or general student.

ART*H102 Art History II 3 credits
 This course is a survey of Western art and architecture from the early Renaissance to the present day through an historical, cultural, and technological perspective. The class will include lectures, video, and slide presentations. For the art major or general student.

ART*H111 Drawing I 3 credits
 Fundamentals of drawing and the use of line as an expressive medium are examined to show structure of form and space in still life, landscape, and the human figure. Work in a variety of media including pencil, pen and ink, wash, charcoal, and pastel is included.

ART*H112 Drawing II 3 credits
*Prerequisite: ART*H111 or permission of the Division Director.* This is a continuation of ART*H111. Planned experiments using various media and the development of a personal style in drawing are offered.

ART*H121 Two-Dimensional Design 3 credits
 This is an introduction to color and design in two-dimensional work in various media.

ART*H122 Three-Dimensional Design 3 credits
*Prerequisite: ART*H121.* This course is an introduction to three-dimensional studio techniques, use of materials, tools and media.

ART*H131 Sculpture I 3 credits
 This course is an introduction to sculptural form and composition through direct techniques in a variety of materials including wood, plaster, clay and plastics.

ART*H132 Sculpture II 3 credits
Prerequisite: ART*H131 or permission of the Division Director. This is a continuation and development of techniques introduced in Art*H131 as well as involvement in more advanced processes such as kinetic, metals and large scale work. Independent work will be encouraged.

ART*H151 Painting I 3 credits
Prerequisite: ART*H111. This is a beginning course in painting in which the student is introduced to the methods and materials of painting and is encouraged to develop some proficiency in the technique of oils, acrylics, or watercolor through exploration and experimentation

ART*H152 Painting II 3 credits
Prerequisite: ART*H151 or permission of Division Director. This is a continuation of ART*H151. Emphasis is on the development of skills and individual expression in the use of oils or acrylics.

ART*H160 Crafts 3 credits
 This course is an introduction to a variety of crafts, techniques and materials, with emphasis on individual exploration of areas of specific interest including fiber, paper, and simple printmaking. Other crafts such as enamels, leather, textiles, clay and metals may be included at the discretion of the instructor.

ART*H161 Ceramics I 3 credits
 This is an introduction to the creative possibilities of ceramic clay in pottery and sculpture through basic hand modeling techniques such as coil, slab, drape, and potter's wheel. Firing and kiln procedures will also be covered.

ART*H162 Ceramics II 3 credits
Prerequisite: ART*H161 or permission of Division Director. This course is a continuation of ART*H161. Concentration is on wheel thrown and hand built forms, kiln operation and glaze formation.

ART*H167 Printmaking I 3 credits
 Introduction to basic techniques in such graphic processes as silk screen, block printing, offset and dry-point etching.

GRA*H150 Introduction to Graphic Design 3 credits
 This course is an introduction to the basic principles and processes of Graphic Design. Students will learn basic design, layout, and imaging skills through the use of IBM software applications for computer graphics (Quark Xpress and Adobe Illustrator). Previous drawing/design experience and computer skills are helpful.

ASTRONOMY **Science, Technology, Engineering & Mathematics** **Division**

AST*H101 Principles of Astronomy 3 credits
Prerequisite: MAT*H095 or placement test score. This course explores man's rapidly growing knowledge of the Cosmos. Topics include: the sun as a star; the birth and death of stars; the nature of black holes, pulsars, and quasars; the origins of our solar system and the Universe; the identification of stars and constellations in the night sky; and the nature of time as man's invention. Observatory sessions and projects planned as weather permits. *Students may not receive credit for both AST*H101 and AST*H111.*

AST*H111 Introduction to Astronomy 4 credits

Pre-requisite MAT*H095 or placement score. This course is designed to give an overview of the major topics in astronomy and requires basic algebra. The topics covered include: the night sky, the origins of astronomy, a brief description of physics in astronomy, our solar system, stars, galaxies and cosmology. The lab portion will support the understanding of concepts and computation in astronomy. Sessions in the NVCC Observatory will be an integral part of the course. Three hours of lecture and two hours of laboratory weekly. *Students may not receive credit for both AST*H101 and AST*H111.*

AUTOMATED MANUFACTURING **ENGINEERING TECHNOLOGY** **Science, Technology, Engineering & Mathematics** **Division**

Refer to Manufacturing.

AUTOMOTIVE TECHNICIAN **Business Division**

ATP*H100 Integrated Automotive Systems 3 credits
 This is an introductory course for the Automotive Technician providing the theory for a foundation in the field. Emphasis will be on basic automotive service procedures and the inter-relationship of the various automotive systems. Shop safety, proper care and use of tools are included. Two-hour lecture and two and one-half hours laboratory weekly.

ATP*H110 Automotive Electrical Systems 3 credits
Corequisite: MAT*H095 or satisfactory completion of College placement test or with permission of the Coordinator. The study of electrical theory and nomenclature along with applications of electrical/electronic systems. To include, but is not limited to: starting, charging, lighting, wiring, accessories, diagnosis and repairs. Two-hour lecture and two and one-half hours laboratory weekly.

ATP*H120 Engine Repair 3 credits
Corequisite: ATP*H100 or with permission of the Coordinator. Diagnosis of automotive engines and their lubrication and cooling systems. Included is engine construction, operation along with disassembly and assembly techniques. Two-hour lecture and two and one-half hours laboratory weekly.

ATP*H130 Brakes 3 credits
Corequisite: ATP*H100 or with permission of the Coordinator. Covers the maintenance, diagnosis and repair procedures of disc and/or drum brake systems including ABS (antilock brakes) along with their mechanical, hydraulic and electrical components. Two-hour lecture and two and one-half hours laboratory weekly.

ATP*H140 Automotive Heating and Air Conditioning 3 credits
Corequisite: ATP*H100 or with permission of the Coordinator. Theory-related instruction of the automotive heating and air conditioning systems. Emphasis is placed on basic refrigerant cycles, heat transfer, trouble shooting, and diagnosis of both refrigerant and electronic control systems. Two-hour lecture and two and one-half hours laboratory weekly.

ATP*H150 Suspension and Steering 3 credits
Corequisite: ATP*H100 or with permission of the Coordinator. The diagnosis and repair of steering and suspension systems and their inter-relationship to wheel alignment. The course includes a thorough knowledge of wheel and tire maintenance. Two-hour lecture and two and one-half hours laboratory weekly.

ATP*H185 Automotive Service and Parts Department Management 2 credits
Prerequisite: ATP*H100 or with the permission of Coordinator. Topics in this course include marketing techniques, financial analysis, personnel management, work scheduling and distribution, and use of pricing manuals. An in-depth study of parts numbering, storage, cataloging, retrieval, ordering, and stocking management techniques will be discussed. Two lecture hours weekly.

ATP*H190 Metallurgy/Welding 2 credits
 In the automotive field, the use of the oxyacetylene torch and the mig welder is common place. Automotive technicians need to be able to use the processes of welding and brazing, etc. safely and skillfully. This course offers both theory and a practical lab section so students will be both skilled and knowledgeable in all the welding technology covered. One-hour lecture and two hours of laboratory weekly.

ATP*H210 Engine Performance 3 credits
*Prerequisite: ATP*H110 or with permission of the Coordinator.* Fuel theory and nomenclature necessary to service and repair computerized automotive fuel systems. This includes but is not limited to computer controls, ignition, fuel, exhaust and emission systems and their maintenance, diagnosis, adjustments and repair. Two hours lecture and two and one-half hours laboratory weekly.

ATP*H220 Automotive Emissions 3 credits
*Prerequisite: ATP*H210 or with permission of the Coordinator.* This is a continuation of ATP*H210, emphasizing practical application on the cause and effect of HC, CO, and NOx emissions. This includes various systems diagnosis, containing but not limited to, general powertrain, computerized powertrain controls, fuel and air induction, emissions control, and I/M failure. Two-hour lecture and two and one-half hours laboratory weekly.

ATP*H261 Manual Drive Train and Axles 2 credits
*Corequisite: ATP*H100 or with permission of the Coordinator.* The diagnosis and repair of manual drive transmissions and transaxles. This includes clutches, drive (half) shaft, and universal joints along with rear axle and four wheel drive components. One-hour lecture two hours lab weekly.

ATP*H262 Automatic Transmission and Transaxle I 2 credits
*Corequisite: ATP*H100 or with permission of the Coordinator.* The operation, diagnosis and maintenance of automatic transmission and transaxles to include in-vehicle and off-vehicle adjustments and repair. One-hour lecture and two hours lab weekly.

ATP*H270 Introduction to Diesel Mechanics 3 credits
*Coerequisites: ATP*H100 or with permission of Coordinator.* The course introduces the diesel engine, its capabilities, operations, and its unique engine fuel delivery systems. Two-hour lecture and two and one-half hours of laboratory weekly.

ATP*H280 Alternative Fuel Vehicle Fundamentals 2 credits
 This course is designed to prepare automotive technicians, dealers, and repairers to take the ASE Alternative Fuel Vehicle Certification examinations. It covers fundamental procedures, operations, safety, regulations and inspection of Alternative Fuel Vehicles. One-hour lecture and two hours of laboratory weekly.

ATP*H290 Cooperative Work Experience I 3 credits
*Prerequisites: ATP*H100, 110, 120, 130, 150, ENG*H101, minimum 30 credits of course work completed and a 2.5 GPA, or with permission of Coordinator.* This required course is designed to bridge the gap between academic theory and practical work experience. It consists of a minimum 250-hour Cooperative Work Experience

ATP*H291 Cooperative Work Experience II 3 credits
*Prerequisites: ATP*H290 and a minimum of 40 credits of course work completed and a 2.5 GPA, or with permission of Coordinator.* This required course is designed to bridge the gap between academic theory and practical work experience. It consists of a minimum 250-hour Cooperative Work Experience.

AVIATION SCIENCE Business Division

AVS*H101 Private Pilot Lecture 3 credits
*Corequisite: AVS*H201.* This ground school course includes coverage of basic flight concepts, principles of meteorology, aeronautical charts and publications, pre-flight planning, flight computer and plotter, basic radio navigation, Federal Aviation Regulations, basic aerodynamics, aircraft avionics, and emergency procedures. This course prepares students for the FAA Private Pilot Knowledge Test.

AVS*H103 Instrument Lecture 3 credits
*Prerequisite: AVS*H101, AVS*H201.* This ground school course includes coverage of human factors and aviation physiology, the construction, use and interpretation of aircraft instruments used in instrument flight, Federal Aviation Regulations, instrument navigation, the ATC system, aeronautical charts and publications related to instrument flight, instrument approaches, weather analysis for instrument operations, and instrument emergency procedures. This course prepares students for the FAA Instrument Rating Knowledge Test.

AVS*H104 Commercial Pilot Lecture 3 credits
*Prerequisite: AVS*H103, AVS*H203.* This ground school course includes coverage of advanced human factors and aeronautical decision making for commercial operations, advanced navigation, advanced aircraft systems, advanced aerodynamics and commercial maneuvers, and emergency procedures for commercial operations. This course prepares students for the FAA Commercial Pilot Knowledge Test.

AVS*H120 Foundations of Aviation 3 credits
 This course explores the events that have shaped the development of aviation from the earliest attempts at flight up to the present day. The historical foundation of aviation is used to develop an understanding of the economic, social, and political impact of aviation on society.

AVS*H130 Air Transportation System 3 credits
 This course provides a historical background and an overview of the major segments of the air transportation industry. Current state and federal agencies and the regulations influencing air transportation, as well as the basis for their establishment, are also discussed. Requirements of the past, present and future with respect to aircraft and engine design, airports and supporting facilities are reviewed and evaluated. Students are introduced to the economics of airline operations and maintenance, and the general factors that influence an airline's survival and profitability.

AVS*H140 Aerospace Safety 3 credits
 This course is designed to provide the student with an understanding of the role of government agencies in ensuring aerospace safety. The ways in which airlines and airports ensure public safety and security will also be discussed. Emphasis will be on critical analysis of case studies involving investigations and prevention of aircraft accidents.

AVS*H150 Airport Management I 3 credits
 This course provides an overview of the operational requirements needed for airports and airport terminals with an emphasis on the facilities that comprise an airport system, including airspace, airfield, terminal, and ground access operations. The financial aspects of airport planning as well as airport capacity considerations are also discussed.

AVS*H151 Airport Management II 3 credits
*Prerequisite: AVS*H150.* This course is a continuation of AVS*H150. Emphasis is on managing daily airport operations, airport organization and administration, and financial management of the airport facility. Airport improvements and the relationship of airports with tenants and the general public are also discussed.

AVS*H201 Private Pilot Flight Training Lab 3 credits
*Corequisite: AVS*H101. ALL FLIGHT TRAINING COSTS ARE THE RESPONSIBILITY OF THE STUDENT.* Students will receive approximately 50 hours of flight instruction covering topics that include pre-flight operations, aircraft systems, ground operations, basic flight maneuvers, ground reference maneuvers, normal and emergency procedures, cross-country operations, and flight by reference to instruments. Co-op instruction is designed to augment students' flight training and includes the use of a flight simulator as well as classroom discussion of selected topics. This course prepares students for the FAA Private Pilot Practical Test (ASEL).

AVS*H203 Instrument Flight Training Lab 3 credits
Corequisite : AVS*H103. ALL FLIGHT TRAINING COSTS ARE THE RESPONSIBILITY OF THE STUDENT. Students will receive approximately 50 hours of flight instruction covering topics that include pre-flight operations, full and partial panel procedures, systems and equipment malfunction, instrument navigation techniques, holding and approach procedures, and emergency procedures for instrument flight. Co-op instruction is designed to augment students' flight training and includes the use of a flight simulator as well as classroom discussion of selected topics. This course prepares students for the FAA Instrument Rating Practical Test (ASEL).

AVS*H204 Commercial Flight Training Lab 3 credits
Corequisite : AVS*H104. ALL FLIGHT TRAINING COSTS ARE THE RESPONSIBILITY OF THE STUDENT. Students will receive approximately 120 hours of flight instruction covering topics that include pre-flight operations, aircraft systems, advanced ground operations, advanced flight maneuvers, normal and emergency procedures, commercial cross-country operations, and complex aircraft operations. Co-op instruction is designed to augment students' flight training and includes the use of a flight simulator as well as classroom discussion of selected topics. This course prepares students for the FAA Commercial Pilot Practical Test (ASEL).

AVS*H255 Human Factors in Aviation 3 credits
 This course explores physiological and cognitive factors such as hypoxia, disorientation, stress, fatigue, anxiety and the effects of alcohol and other drugs on critical judgment and decision making processes of operational personnel in aviation. Investigation of our unique human capabilities and limitations is used to develop strategies to improve the performance of flight crews, air traffic controllers, flight management and other operational personnel as they identify and respond to critical, time-sensitive situations in aviation operations.

BIOLOGICAL SCIENCES **Science, Technology, Engineering & Mathematics** **Division**

BIO*H105 Introduction to Biology 4 credits
 The general principles of biology are taught using a combination of multimedia lectures, discussion groups, and a laboratory component. Topics covered include cell biology, diversity, biotechnology, basic chemistry, cellular respiration and photosynthesis, ecology, genetics, behavior, and evolution. Laboratory includes an animal dissection. Three hours of lecture and three hours of laboratory weekly.

BIO*H110 Principles of the Human Body 3 credits
*Open to students needing a three-credit science course in their program of study including Liberal Arts and Sciences and General Studies. Students may not receive credit for both BIO*H110 and BIO*H115.* This course is an introduction and survey of human anatomy and function including the digestive, circulatory, respiratory, immunological, urinary, nervous, sensory, muscular, skeletal, endocrine, and reproductive systems of the body. The course will include discussions of the evolution of the human body and its dynamic interaction with the environment. Not open for credit to students who have passed any higher-numbered human biology or anatomy and physiology course.

BIO*H111 Introduction to Nutrition 3 credits
 A basic introduction to the science of nutrition with an emphasis on making healthy food and lifestyle choices. Health and disease, metabolism, cultural diversity and food processing are studied in relationship to individual nutrients as well as to total dietary patterns. Information presented enables analysis and modification of diets to promote health, reduce the risk of deficiencies and chronic diseases related to nutrition and evaluate dietary advertising, controversies and nutritional policies.

BIO*H115 Human Biology & Lab 4 credits
*Students may not receive credit for both BIO*H110 and BIO*H115.* This introductory course will focus on the overarching themes of health, homeostasis, evolution and the environment as they relate to human body systems. Laboratory experiments include microscopic examination of cells and tissues, anatomy, physiology of nerves and muscles, blood typing, and principles of inheritance. Three hours of lecture and three hours of laboratory weekly.

BIO*H121 General Biology I - Cellular Biology 4 credits
 The general principles of biology are taught integrating lectures, laboratory experiments, computer simulations, discussions, and other activities to help students gain an understanding of the essential biological concepts. The foci of this course are scientific method, cell biology, viruses, prokaryotic organisms, protists, basic cell chemistry, photosynthesis, cellular respiration, mitosis & meiosis, genetics, and biotechnology (plant tissue culture, genetic transformation). Cooperative learning, critical thinking, library research, as well as presentation skills are utilized culminating in a team project that includes a written paper and a short presentation. This course is one part of a two semester sequence in general biology primarily for students seeking transfer into a four-year degree program. BIO*H121 (Cellular Biology) and H122 (Organismal Biology) can be taken in any order and are transferable. This course satisfies the general education core science requirement. Integrated 3 hours lecture & 3 hours lab.

BIO*H122 General Biology II - Organismal Biology 4 credits
 Utilizing the same integrative approach as BIO*H121, students will investigate biotechnology (gel electrophoresis for DNA and protein analysis), systematics, biological statistics, population genetics, evolution, plant biology (life-cycles and growth of fungi, non-vascular, and vascular plants), animal biology (early development and histology, comparison of invertebrate and vertebrate life cycles and physiological systems), and ecology. Science process skills are emphasized. Collaboratively, students will investigate a scientific research topic culminating in a written report and oral presentation to their peers. This course is one part of a two semester sequence in general biology primarily for students seeking transfer into a four-year degree program. This is the second semester of general biology; however, BIO*H121 (Cellular Biology) and H122 (Organismal Biology) can be taken in any order. This course satisfies the general education core science requirement for both non-majors & majors. Integrated 3 hours lecture & 3 hours lab.

BIO*H145 General Zoology 4 credits
 This lecture-laboratory is a survey of the animal kingdom. Topics discussed include morphology, anatomy and physiology, life cycles, reproduction, evolution, and ecological relationships of various animal forms. Three hours of lecture and three hours of laboratory weekly.

BIO*H155 General Botany 4 credits
 The focus of this course is how plants function. It is an introduction to plant physiology and development, explaining growth processes, metabolism and hormonal responses. Additional topics, such as soils, plant breeding, and propagation will be addressed. The laboratory component is designed to involve students with important concepts discussed in lecture. Integrated 3 hours lecture & 3 hours lab.

BIO*H171 Field Biology 4 credits
 Lecture-laboratory. This is an introduction to ecology with special emphasis on identification of Connecticut plants and animals in the outdoors. A wide range of topics will be presented including map reading, edible wild foods, and collecting. Three hours of lecture and three hours of laboratory weekly.

BIO*H180 Principles of Environmental Science 3 credits
*Note: Students may not receive credit for both BIO*H180 and BIO*H181.* This is a survey course of environmental studies. Topics discussed include basic ecology; human populations; water, soil, forests and pollution; renewable and non-renewable energy; legislation; citizens action. Dynamic Environmental systems are explored via computer simulations.

BIO*H181 Environmental Science & Lab 4 credits
*Note: Students may not receive credit for both BIO*H180 and BIO*H181.* This course has the same lecture as BIO*H180; however, there is an additional laboratory component. Laboratory experiences include water and soil analyses, pond and river studies, computer simulations, field trips to environmental quality facilities and laboratories. Three hours of lecture and three hours of laboratory weekly.

BIO*H211 Anatomy and Physiology I 4 credits
*Prerequisite: Completion of BIO*H105, BIO*H115 or BIO*H121 with a grade of "C" or better or by permission of the Division Director.* Lecture-laboratory. This is the first semester of a two semester comprehensive course designed for those students who plan to continue in the science field or science-related areas. Major topic areas include molecular biology, cells, tissues and the integumentary, skeletal, muscular and nervous systems of the human body. Laboratory includes an animal dissection. Three hours of lecture and three hours of laboratory weekly.

BIO*H212 Anatomy and Physiology II 4 credits
*Prerequisite: Completion of BIO*H211 with a grade of "C" or better or permission of the Division Director.* Lecture-laboratory. Major topic areas include the cardiovascular, lymphatic/immune, respiratory, digestive, endocrine, urinary and reproductive systems of the human body. Laboratory includes an animal dissection. Three hours of lecture and three hours of laboratory weekly.

BIO*H225 Introduction to Biotechnology 4 credits
 This course studies the fundamental concepts underpinning the expanding field of biotechnology with an emphasis on agricultural and environmental applications. It is a hands-on course where students will actively investigate essential cell biology, plant tissue culture, genetics, population genetics, fermentation-microbial food production, genetically modified crops, gel electrophoresis, allergic immune response, as well as agricultural, ecological, and societal issues. Computer simulations, student presentations, and field trips are also used to facilitate active learning. Three (3) hours of lecture and three (3) hours of laboratory weekly.

BIO*H227 Biotechnology II 4 credits
*Prerequisites: Completion of BIO*H225 and BIO*H235 or permission of instructor.* This course builds on principles and practices learned in Introduction to Biotechnology (BIO*H225) and Microbiology (BIO*H235). Students will develop an understanding of the theoretical basis of this technology as well as develop laboratory skills, through hands-on experiences, that are essential for employment in biotechnology. With an emphasis on molecular biology, students will investigate the following areas of biotechnology: animal cell culture, genetic transformation, DNA isolation, restriction digests including DNA fingerprinting, plasmid transformation, PCR amplification, DNA sequencing, southern blot analysis, and separation technology. Three (3) hours of lecture and three (3) hours of laboratory weekly.

BIO*H235 Microbiology 4 credits
*Prerequisite: BIO*H105, or H115 or H155 or H121, or H225, or permission of the Division Director.* This course introduces the student to bacteria and other microorganisms. Particular emphasis is placed on the biology of bacteria and bacterial diseases. Fungi, viruses, protozoans are also studied. Immunology, microbial genetics and biotechnology are discussed. The emphasis in the laboratory is on the identification, safe handling and cultivation of microbes. Activities include staining techniques, identification of unknowns, electrophoresis, computer simulations and growth experiments with comparative analysis of results. Three hours of lecture and three hours of laboratory weekly.

BIO*H260 Principles of Genetics 3 credits
*Prerequisite: BIO*H105 or equivalent.* This is an introduction to the principles of genetics. It covers Mendelian analysis, chromosome theory, extensions of Mendelian analysis, molecular genetics, as well as quantitative and population genetics.

BIO*H262 Genetics & Lab 4 credits
*Prerequisite: BIO*H105 or equivalent. Credit cannot be given for both BIO*H260 and BIO*H262.* Same lecture as BIO*H260 but with a laboratory component. The laboratory investigations include experiments with *Drosophila* and bacteria. Computer simulations, bacterial transformations, and gel electrophoresis are also carried out. Three hours of lecture and three hours of laboratory weekly.

BUSINESS Business Division

BBG*H101 Introduction to Business 3 credits
 A survey of the fundamental principles of business will be discussed including marketing, management, finance, accounting, and human resource development. This course is required for most students majoring in business.

BBG*H210 Business Communication 3 credits
*Prerequisites: ENG*H101.* This course is an analytical approach to the development of content in business writing with emphasis on the relationship of creative and logical thinking to the solution of business problems through concise, coherent written and oral communications.

BBG*H215 Global Business 3 credits.
 This course provides an introduction to the nature and Environment of international business. Topics will include the nature of international business, international organizations and monetary systems, foreign Environments and management tools necessary for international business opportunities and operations. Social, political and economic factors which impact on international business interactions are also studied.

BBG*H231 Business Law I 3 credits
 The legal rights, duties, and responsibilities of the business person are examined. Topics include a general introduction to the meaning and nature of the law, and the structure of the American legal system. Emphasis is placed upon the basic principles of the law of contracts, torts, criminal law and procedure, agency, real property, wills, and decedent's estates.

BBG*H232 Business Law II 3 credits
 This course further develops and examines the American legal system, as well as the international legal system. Topic include the uniform Commercial Code, ethics, consumer protection laws, secured transactions, intellectual property law, corporate law, partnership law, limited liability companies and numerous aspects of international law. It is recommended that Business Law I be taken before Business Law II.

BES*H118 Small Business Management 3 credits
 This course is designed to assist students with the knowledge and skills needed to operate and/or develop a small business. Emphasis will be placed on the entrepreneurial aspects of creating, managing, and gaining profit from a small business.

BMK*H220 Sales 3 credits
 Basic principles underlying the sales process and their practical application to sales situations are studied. Economics and psychological and sociological relationships in the marketplace, as they apply to sales of industrial and consumer goods and intangibles, are examined.

BMG*H105 Supervision and Organizational Behavior 3 credits
*Prerequisite: BMG*H202.* Emphasis on the latest developments in the fields of management. Group discussions of case studies and problem are included. Also, emphasis on group work and the use of the computer as an aid in the decision-making process in a micro-organizational settings is included. Additional software may be required.

BMG*H202 Principles of Management 3 credits
This course deals with management theory, science, and practice. Consideration is given to management thought and analysis. The external Environment, both domestic and international, is reviewed as well as the major functions of planning, organizing, directing, and controlling business. The coordinating function of the business manager is considered. Decision-making processes and techniques are also stressed.

BMG*H220 Human Resources Management 3 credits
Prerequisites: BBG*H101. This course deals with personnel management in the process of manpower administration in the business organization. Treatment is given to procurement and human resource utilization and the role of labor unions in the industrial organization. The development of the role of the person and personality amidst the various social sciences and organization structures required to achieve an organization's goals are studied – as in motivation.

BMK*H201 Principles of Marketing 3 credits
This course deals with the marketing function of the firm primarily from the management standpoint. Topics include marketing strategy, new products, channels of distribution, pricing, and promotion. The function of the marketing institution in economic and social context is considered.

BMK*H216 Internet Marketing 3 credits
Develop a working knowledge of the World Wide Web as a marketing vehicle providing fast/efficient electronic commerce and the ability to manage the Internet marketing process for a small to medium-sized business enterprise. Internet is fast becoming the ultimate distribution system to disseminate marketing data, identify/segment customers to provide sales force attention, customer service activity, and ordering. Electronic Commerce Marketing Principles will prepare a student to intelligently apply the Marketing Mix disciplines and concepts to a company's products/services in order to effectively prepare and execute "Marketing Plans" participating in the growing "electronic commerce" segment of business.

BUSINESS FINANCE **Business Division**

BFN*H201 Principles of Finance 3 credits
This introductory course will provide an understanding of the role of finance in the economy, business management, government and consumer financing. Included are the fiscal, monetary and debt management policies of government.

BFN*H203 Investment Principles 3 credits
This course gives a broad perspective on investment objectives and values, as well as a study of securities, market and values. A study of securities, market procedures, analytical techniques, speculative and institutional markets is also included.

BFN*H220 Financial Management 3 credits
Prerequisite: BFN*H201 or permission of Division Director. This course is an in-depth study of finance including the mathematics of finance, corporate securities; also included are short, intermediate and long term sources of funds; and liabilities, income administration, mergers and acquisitions, and working capital.

BRE*H201 Real Estate Principles 3 credits
Prerequisite: BFN*H201, Real Estate License or permission of Division Director. The topics studied in this course include fundamentals of mortgage, deeds, loan applications, real estate credit, mortgage markets, and current legislation affecting real estate finance.

BRE*H205 Real Estate Law 3 credits
This course examines the legal Environment of real estate including contracts, deeds, instruments, easements, estates in land, zoning, tenants, liens, foreclosure, transfers of titles, leases, and relevant court rulings. (LGL*H104 is a substitution for this course.)

CHEMISTRY **Science, Technology, Engineering & Mathematics** **Division**

CHE*H111 Concepts of Chemistry 4 credits
Prerequisite: MAT*H137. *Lecture-laboratory.* This is a foundation course designed to present chemical concepts including the metric system, scientific measurements, atomic theory, chemical bonding, periodic variation of the elements, nomenclature, equations, gas laws, stoichiometry, basic types of chemical reactions, and a brief survey of organic chemistry. This course is open to students with little or no background in chemistry. Three lecture hours and three laboratory hours weekly.

CHE*H121 General Chemistry I 4 credits
Corequisite: MAT*H172, its equivalent or permission of instructor. *Lecture-laboratory.* The fundamental concepts and laws of chemistry are examined. Topics covered include atomic theory, chemical bonding, periodic table and periodic law, nomenclature, states of matter, solutions, stoichiometry, acid-base theory, oxidation, reduction, and coordination chemistry. Three lecture hours and three laboratory hours weekly.

CHE*H122 General Chemistry II 4 credits
Prerequisite: completion of CHE*H121 with a grade of "C" or better. *Lecture-laboratory.* This course provides a more specific discussion of major topics within the four major divisions of chemistry. Topics covered include colloids, kinetics, equilibrium, thermodynamics, nuclear chemistry, electro-chemistry, discussion of physical and chemical properties of selected groups on the periodic table, ionic equilibria of weak electrolytes, buffer solutions and titration curves, solubility product, qualitative analysis, and a brief introduction to organic chemistry. Three lecture hours and three laboratory hours weekly.

CHE*H211 Organic Chemistry I 4 credits
Prerequisite: CHE*H121-122 or acceptable one-year college chemistry course at another institution. *Lecture-laboratory.* This is a fundamental course involving systematic study of the reactions of organic compounds, the relationships between molecular structure and reactivity, and an introduction into spectroscopic analysis. The laboratory has been revised to include the ultra modern microscale technique. This approach includes some of the following advantages: elimination of fire or explosion danger, elimination of chemical waste disposal problems, expansion in variety and sophistication of experiments, and creation of a much healthier laboratory environment. Three lecture hours and three laboratory hours weekly.

CHE*H212 Organic Chemistry II 4 credits
Prerequisite: CHE*H211. *Lecture-laboratory.* This course is a continuation of Che*H211, dealing with more complex classes of carbon compounds including sugars, amino acids and proteins, heterocyclics, and polymers. The laboratory has been revised to include the ultra modern microscale technique. This approach includes some of the following advantages: elimination of fire or explosion danger, elimination of chemical waste disposal problems, expansion in variety and sophistication of experiments, and creation of a much healthier laboratory environment. Three lecture hours and three laboratory hours weekly.

COMMUNICATIONS **Liberal Arts and Behavioral/Social Sciences Division**

COM*H100 Introduction to Communication 3 credits
Prerequisite: Placement into ENG*H101. An introduction to the field of communication and to the strands of communication study: intrapersonal, interpersonal, small group, and public communication. Students will develop communication skills as they relate to the self and to interaction in small and large groups in everyday interpersonal situations.

COM*H101 Introduction to Mass Communications 3 credits.

This course acquaints students with the complex nature of the media through which they communicate. The course will introduce the various forms of communication media; the role of media as it informs, entertains and persuades; and the effects of media on individuals and society.

COM*H157 American Film 3 credits

Students survey American film from its beginnings to the present. The course will include the silent era, birth of sound, and typical genres.

COM*H158 International Cinema 3 credits

A study of the origin and development of film as an art form, including the summation of outstanding films produced in France, Italy, Sweden, Denmark, India, and Japan. Discussions of documentary and short subject contributions toward this development are included.

COM*H172 Interpersonal Communication 3 credits

This course examines the role of interpersonal communication in human relationships. The focus of this course is on improving interpersonal skills and helping students increase their communication competence in everyday social exchanges.

COM*H173 Public Speaking 3 credits

This course provides students with an understanding, appreciation, and capacity for public speaking. Excellence in public speaking requires mastery of informative and persuasive techniques of language, organization, citation of evidence, and use of rhetorical patterns of introduction and conclusion. Exposure to theoretical elements and their application in public speaking will be explored in this class.

COM*H178 Small Group Communication 3 credits

The purposes of this course are (a) to provide an overview of theory and research in key areas of study in small group communication, (b) to teach skills in group decision making, and (c) to give students the opportunity to apply theory, research, and decision making skills by interacting in a group environment.

COM*H202 Intercultural Communication 3 credits.

*Prerequisites: COM*H101 or H172.* This course will be an introduction to the major principles and theories of intercultural communication. It will emphasize the application of skills and concepts for increasing cultural awareness and communication competency in a variety of cultural contexts. Exposure to communication systems and formations from different cultures will be used as a means to provide various ways of thinking about cultures.

COM*H226 Journalism I 3 credits

*Prerequisite: ENG*H101.* Students explore methods and techniques of news gathering, news writing, and news analysis. By covering campus and community events, they make practical application of theory.

COMPUTER-AIDED DRAFTING/DESIGN TECHNOLOGY
Science, Technology, Engineering & Mathematics Division

Note: All software used in these courses are subject to change.

CAD*H110 Introduction to CAD 3 credits

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.

CAD*H150 CAD 2D (AutoCAD) 3 credits

Introduction to two-dimensional computer-aided drafting using Autocad. Included are drawing and editing of elementary geometric entities, dimensioning and plotting. Also, mechanical drafting problems and examples will be studied. One class hour and four laboratory hours weekly.

CAD*H200 3D CAD Modeling 4 credits

*Prerequisite: CAD*H150.* The primary focus of this course is three dimensional geometric computer modeling using AutoCAD. Students will study the geometric construction and development of wireframe, surface, solid, and assembled solid models. They will also develop 2D orthographic drawings including sectional and auxiliary views from solid models. In addition, rendering to produce picture quality images of the various models will be covered. Mass property analysis and an introduction to the descriptive geometry may also be included. Two class hours and four laboratory hours weekly.

CAD*H220 Parametric Design 3 credits

*Prerequisite: CAD*H150 or approval of the instructor.* Introduction to the paperless computer based design process using modern parametric 3-D design software. The course focuses on parametric modeling, and includes topics such as the design process, design engineering, assembly modeling, mechanism analysis, rapid prototyping, team design, geometric dimensioning and tolerancing, and the analysis of tolerance stickups. Students will participate in individual and group design projects as appropriate. One class hour and four lab hours weekly.

CAD*H275 CAD Animation (3D Studio Max) 4 credits

*Prerequisite: CAD*H200 or experience in 3D computer modeling.* This course will guide the student through the world of three-dimensional presentation. The student will create photo realistic still images, animated assemblies, camera fly-bys, robotic motion, and dynamic life-like animated presentations. The concepts covered in this course can be applied to a variety of engineering disciplines. 6 contact hours (2 lecture and 4 laboratory)

CAD*H285 Computer Integrated Manufacturing (CIM) I 3 credits

*Prerequisite: CAD*H200, MAT*H172.* This course is an introduction to the mechanical design process used to develop intelligent product models that can be used in Computer Integrated Manufacturing (CIM). The students will gain an understanding of the basic principals of 3D solid modeling, parametric relationships, and controlling design intent and object dependencies. Students will develop complete product designs, outputting 3D solid and sheet metal parts, tolerance analysis, family tables and assembly models, related detail and assembly drawings, and prototypes. 4 contact hours (2 lecture and 2 laboratory)

CAD*H286 Advanced Modeling Techniques 3 credits

*Prerequisite: CAD*H285.* This course builds on the concepts developed in CAD*H285, Introduction to Advanced Modeling. It develops advanced modeling concepts, techniques and methods used in modern product modelers- topics such as user interface customization, user defined features, writing programs within the CAD system, sweeps, advanced rounds, and basic stress analysis. Students will work on their own and in groups to develop complete product designs, outputting 3D solid parts. 4 contact hours (2 lecture and 2 laboratory)

CAD *H294 Senior Project 4 credits

*Prerequisite: CAD*H220, Corequisites: CAD*H275, or approval of the department chair.* The course offers students a CAD engineering design activity utilizing an assigned, or approved, design project. The project will incorporate a wide range of learning activities including, but not limited to, library research, written status reports, discussions, oral presentations, time management and project planning, team work, the application of the design process, and the utilization of a variety of CAD applications. This class meets for 6 contact hours per week, 2 lecture and 4 lab.

COMPUTER INFORMATION SYSTEMS Business Division

CSC*H101 Introduction to Computers 3 credits

This is an introductory course in information technology concepts and software productivity tools intended for Computer Information Systems majors and other students interested in computers and Information Technology. Areas of instruction include computer concepts, current topics and trends in information technology, the role of computer systems in business problem solving, an introduction to the major career areas of Information Technology and Microsoft Office skills that are important to all college students.

CSC*H113 Programming I 3 credits

Fundamentals of programming and program development techniques. This is a first step programming course which emphasizes problem solving and sound programming practices. No previous programming experience is necessary. Topics include data types, functions, storage class, selection, repetition, pointers, arrays, and file processing. Programming laboratory projects in a laboratory environment are supervised by the instructor.

CST*H120 Introduction to Operating Systems 3 credits

An introduction to the personal computer, hardware, and Operating Systems software. The most popular microcomputer operating systems and graphical interfaces will be discussed in detail. After satisfactorily completing this course, the student will have a thorough understanding of the command structures of the operating systems. Students will receive a brief introduction to local area networks from a user perspective. Laboratory projects will be assigned throughout the course to reinforce course material.

CST*H130 Networking Essentials I 3 credits

An in-depth study of communications in a networking Environment. Included is the history of networking, OSI model, data types, signaling, multiplexing, signal conversion, data transmission, topologies, channel access method, switching techniques, SDLC, HDLC, IEEE standards, Arcnet, Ethernet, Token Ring, TCP/IP IP, SNA, and the future of networking.

CSC*H183 Information Systems in Organizations 3 credits

The focus of this course is on how organizations use information systems for decision making. In particular, the course stresses the role of managers in the analysis, design, development, implementation, maintenance and control of information systems as corporate resources. Course includes a hands-on approach to communications using workgroup software.

CSC*H205 Visual Basic I 3 credits

This course uses Visual Basic .NET, an object-oriented/event-driven language, to teach programming concepts. Through "hands-on" application of the concepts presented in the lectures and tutorials, the student will learn the Visual Basic .NET tools used to create applications that correspond to Windows standards. By the end of the course, the student will be able to design and code simple business applications and will be prepared for more advanced courses in programming using VB, C++, etc.

CSC*H206 VISUAL BASIC II 3 credits

Prerequisite: CSC*H205. The course covers a wide range of advanced programming topics using Visual Basic.NET an object oriented, event driven programming language. The goal of the course is to develop computer programming skills beyond the basics covered in the introductory course. This includes arrays and collections, object variables, database programming, web programming, web services, and extensive use of the .NET classes.

CSC*H211 VB & ASP .NET Web Programming 3 credits

Prerequisite: CSC*H205. This course covers a wide range of topics in the area of web application development using Microsoft ASP .NET. and the Visual Basic programming language. After an introduction to basic web design techniques, students will progress to more advanced e-commerce applications. Topics include working with server controls, validation techniques, managing state, authenticating users, and the use of themes. Relational databases are a big part of e-commerce applications and are also an important topic area in this course.

CSC*H213 Object-Oriented Programming Using C++ 3 credits

Prerequisite: CSC*H205, CSC*H113, or any programming language equivalent. This course is designed for a more advanced programming student who wish to learn C++ with object-oriented techniques. The course will contain the basic concepts of an object-oriented programming language. Topics will include classes, constructor and destructor functions, function overloading, operator overloading, class inheritance, polymorphism, stream input/output, manipulator functions, templates and exception handling.

CSC*H214 Advanced C++ Programming 3 credits

Prerequisite: CSC*H213. Topics include methods and techniques used in software development cycles. You will learn to move beyond a simple mastery of syntax. You will learn to increase productivity by combining tools, idioms, syntax, and libraries. Numerous hands-on exercises provide real-world experience in developing high quality C++. Throughout the course, you gain extensive hands-on experience with advanced C++ programming techniques. You will be required to develop complete programs from architectural design through to refining the implementation via a series of exercises.

CSC*H217 Object-Oriented Programming Using C# 3 credits

Prerequisite: CSC*H205 or CSC*H113 or any programming languages equivalent. This course offers students the opportunity to extend their experience and programming skills in the area of .NET development. C# (pronounced C Sharp) is an object-oriented programming language with syntax similar to JAVA, C# is becoming increasingly popular with developers in the areas of Windows applications and web sites using relational databases. Using the Visual Studio Integrated Development Environment (IDE) the course will cover topics including arrays, methods, classes, objects, inheritance, and exception handling, File Streams and database applications will also be an important part of the course..

CSC*H220 Object-Oriented Programming Using JAVA 3 credits

Prerequisite: CSC*H205, CSC*H113 or any programming language equivalent. This course will be an introduction to the Java programming language. We will develop Java applications as well as introduce World Wide Web browser Java applets. We will cover basic control structures and introduce the Object- Oriented (OO) paradigm utilizing classes and objects. We will introduce and develop programs which are event driven. There will be a wide use of the Java Abstract Window Toolkit. The OO model will be used in developing object-based and object-oriented programs. Finally, we will explore the toolkit to develop GUI-based, event-driven programs. There will be several programming assignments. Two tests will be given during the semester in addition to a final exam.

CSC*H227 Web Programming with Java 3 credits

Prerequisite: CSC*H220, CSC*H113. This course picks up where the first Java Programming course left off, introducing the topics of threading and I/O. The remainder of the course serves to extend the student's knowledge of using Java to build enterprise-strength applications, with exposure to both "fat" and "thin" client structures. The course will cover currently used structures of JDBC connectivity, JavaBeans, servlets, JSP and XML and XHTML.

CSC*H228 Mobile Device Programming 3 credits

Prerequisite: CSC*H205, CSC*H113 or any programming language equivalent. This course is designed as an introduction to mobile device programming. It is intended for students with an interest in learning to develop applications which will run on Android based smart phones. Prior programming experience using Visual Basic, Java or C++ is expected.

CSC*H231 Database Design I 3 credits
An introduction to relational database design. Included will be topics on the evolution of database design, data structures, designing a database, normalizing a database design and implementation of databases utilizing one or more of the popular PC database packages available such as Microsoft SQL Server.

CST*H235 Network Systems 3 credits
Prerequisite: CST*H130, or a basic understanding of computer networks. This course teaches the student, through lectures, demonstrations, and classroom labs, the skills and knowledge necessary to configure, manage, and troubleshoot a Windows Server 2008 network infrastructure. The focus of this course will be the installation, configuration, management and support of DHCP and DNS. The course will also address security, the management and installation of services updates, and routing and remote access. Through the use of lab assignments, there is a heavy emphasis on the “hands-on” application of the concepts presented in the lectures and assigned readings.

CST*H236 Advanced Network Systems 3 credits
Prerequisite: CST*H235. This advanced course will cover higher level system management features of the Window Server Operating System. The focus will be planning, implementing and maintaining an Active Directory infrastructure. Through lectures and lab assignments, the student will learn about integration of Active Directory with DNS, administration of user accounts and groups, group policies, security, remote access, and performance monitoring.

CSC*H237 Database Programming with VB.NET 3 credits.
Prerequisite: CSC*H205. This course covers a wide range of relational database programming topics using Visual Basic .NET and ADO .NET objects. Students will learn programming techniques using the Microsoft SQL Server relational database, the .NET System. Data namespace and classes, and disconnected architecture. Topics include SQL queries to create typed and untyped datasets, table relationships, parameterized queries, bound and unbound controls, and data views. Crystal Reports, XML Schema Designer, and Server Explorer tools are used in a hands-on class/lab environment.

CST*H239 Servicing & Support of Local Area Networks 3 credits
Prerequisite: CST*H130. A hands-on course allowing students to install, upgrade, maintain and troubleshoot on Microsoft server operating systems. Class discussion and laboratory exercises include Network Interface Cards (NIC's), networking cabling, disk expansions, installations, upgrades, troubleshooting techniques, and common network problems.

CST*H248 Practices in Security Management 3 credits
Prerequisite: CSC*H101. Security Management entails the identification of an organization's information assets and the development, documentation, and implementation of policies, standards, procedures, and guidelines that ensure confidentiality, integrity, and availability. This course will prepare the student to understand the planning, organization, and roles and individuals involved in security, develop security policies, and utilize management tools used to identify threats, classify assets, and rate vulnerabilities.

CSC*H250 Systems Analysis and Design 3 credits
Prerequisite: CSC*H101 or any programming language equivalent. This course is an introduction to systems analysis and design concepts and techniques. Using a case study method, students will conduct system surveys, create feasibility studies, and design typical computer systems used in business and industry.

CSC*H252 Information Systems Project Management 3 credits
Prerequisite: CSC H101 or any programming language equivalent. This course introduces students to the theory and practice of managing Information Systems and Business projects. Students will learn how to initiate, plan, execute, control, and complete projects in order to meet organizational goals. In addition to traditional project

management tools like PERT and GANTT charts, students will learn to use a project management software simulation tool to assist them in managing classroom projects. A comprehensive final project will be assigned and completed either individually or in collaboration with a student project team.

CST*H274 Network Security Technology 3 credits
Prerequisite: CST*H130. This course takes an in-depth look at network security concepts and techniques. Students will examine theoretical concepts that make the world of security unique. Also, this course will adopt a practical, hands-on approach when examining networking security techniques. Along with examining different network strategies, this course will explore the advancement of network implementation as well as timeless problem solving strategies.

COMPUTER SCIENCE Business Division

CSA*H105 Introduction to Software Applications 3 credits
Prerequisites: Successful completion of ASD-H97, ENG*H063, and MAT*H095; successful completion of placement tests. The computer plays a significant role as a productivity tool in many fields of study and in business. This course introduces the student to the basics of how to use computers as a tool rather than how computers work. It offers instruction and practice on the use of personal computers and a variety of application software. Included is work on word processing, spreadsheets, the operating system, and internet browsing. Basic computer science topics are included to the extent that they support the applications approach. A significant amount of lab work outside

CSA*H135 Spreadsheet Applications 3 credits
Prerequisites: CSA *105 with a grade of “C” or better. The course centers on the use of the current version of MS Excel at an advanced level. Other spreadsheets will be examined, (including online-based versions) as well as the exploration of online collaboration (in Wiki fashion). The instructional methodology will consist of exploring and applying advanced spreadsheet concepts to everyday situations and problems as presented in the textbook and as created by the instructor for the class. These are selected examples: Web query (getting data from a Web site directly into Excel), Goal seek, Excel database concepts, multilevel sorts, subtotals feature, Auto Filter, templates, converting table into a range, adding calculated fields to a table, drilling entries, 3-D references, linking workbooks, advanced functions..

CSA*H205 Advanced Applications 3 credits
Prerequisites: CSA *105 with a grade of “C” or better. This is a hands-on course that focuses on the advanced use of commonly used Microsoft Office applications (Word, Excel, PowerPoint, Access, and the integration of these). The following are selected examples of skills and concepts learned in this class: **1) WORD:** inserting “quick parts,” advanced mail merges, adding editing comments, using the “Track Changes” feature, inserting bookmarks and hyperlinks, and creating equations; **2) EXCEL:** protecting worksheet in various ways, creating and modifying Excel tables, creating custom filters, and using advanced analysis tools, applying advanced functions; **3) ACCESS:** creating tables using correct field types and properties, creating calculated fields, forms, reports, and sophisticated queries; **4) INTEGRATION:** combining data and graphs in various ways using paste options, importing files from external applications, and exporting files in various formats.

CSA*H207 Computer Applications in Management & Marketing 3 credits
Prerequisite: CSA *H105 with a grade of “C” or better; BMK*H201 or BMG*H202. Designed for the career track business student, this course will supply a strong background in the computer skills necessary and useful in business/management and marketing. Specific applications will be based on IBM compatible machines using the Windows Environment, and will include work on business presentations, preparation of brochures, project scheduling, workgroup computing, and business on the internet. Additional topics will be considered.

COOPERATIVE EDUCATION Student Services Unit

CWE-H100 Portfolio Preparation 2 credits
This course stresses analysis of prior learning and self-evaluation of this learning. Students will be expected to assess, organize, and communicate their learning experiences in portfolio form for review by a faculty panel of experts. Students must complete this course to be eligible for formal assessment. Credits do not apply toward a degree. Grade reflects success in coursework only; it does not guarantee or even suggest that portfolio credit will be granted or denied by the readers.

CRIMINAL JUSTICE/PUBLIC SAFETY Liberal Arts and Behavioral/Social Sciences Division

CJS*H101 Introduction to Criminal Justice 3 credits
This is an introductory course designed to acquaint the student with the fields of law enforcement. Study includes an overview of crime and police problems, as well as organization of local, state, and federal law enforcement agencies. (fall/spring)

CJS*H102 Introduction to Corrections 3 credits
An overview of the history and philosophy of the American correctional system, organization and operation of the components of the corrections systems, including correctional centers, prisons, probation, parole and community-based programs, correctional treatment programs ranging from pre-trial diversion to post incarceration procedures. Presentation and discussion of current issues and problems in corrections will be discussed. (fall)

CJS*H103 Introduction to Security 3 credits
The historic, philosophical and legal basis of security, and the role of the security officer and his relationships with the public sector are studied. The functional operation of various specialized areas of security such as theft and risk control, security surveys and loss prevention, management in proprietary and government institutions, safety and fire protection and commercial and retail security is surveyed. (fall)

CJS*H105 Introduction to Law Enforcement 3 credits
An introduction course that covers the basics of law enforcement, evolution of the police function, the police in the criminal justice system, and the social and psychological stresses and their effects on police work, health, and the family. The course also includes the study and analysis of the problems of law enforcement as they relate to the community. (spring)

CJS*H210 Constitutional Law 3 credits
*Prerequisite: CJS*H101 with a grade of "C" or better.* This course traces the history and development of the U.S. Constitution. Topics will include the Commerce Clause, procedural due process, states' rights and civil liberties, the concept of federal supremacy, and state constitutions. (fall)

CJS*H211 Criminal Law I 3 credits
This course is an introduction to the history, theory, and practice of substantive criminal law. Major elements of statutory offenses are discussed. Reference to the Connecticut Penal Code is included. (spring)

CJS*H217 American Legal Systems 3 credits
This course studies the process through which justice is administered and the history of the American legal system. Also examined are the Constitution of the United States as it applies to police forces. Rules of evidence with attention given to judicial notice, presumptions, the nature of real and circumstantial evidence, burden of proof, documentary evidence, hearsay evidence, confessions and admissions will also be studied. Particular emphasis will be given to evidence, arrest procedures, as well as search and seizure. (fall)

CJS*H218 Legal Aspects of Security Operations 3 credits
This course traces the development of the legal aspects of private

security in the United States. Material includes the law as it relates to private security, search and seizure, civil and criminal liability, and evidence. Legal requirements such as licensing, training, and education are also examined. (fall)

CJS*H220 Criminal Investigation 3 credits
This is an introduction to criminal investigation. Study includes the presentation of rules and procedures of preliminary investigation; art of interrogation and recording of statements and confessions; collection and preservation of physical evidence at the crime scene; methods used in scientific interpretation of evidence; and preparation of cases for trial. (spring)

CJS*H224 Computer Crimes 3 credits
This course is designed to give the student an understanding of the various aspects of computer crimes, including hacking, computer break-ins, computer fraud, the introduction of viruses, worms, and trojan horses into computer systems, mail fraud, child pornography, pirated software, sabotage, and espionage. Study includes an overview of the various types of computer crimes likely to be encountered in today's computer Environment, as well as the methods of preventing, investigating, and prosecuting those crimes. (fall)

CJS*H225 Forensic Science 3 credits
The purpose of this course is to familiarize the student with the recognition, preservation, and collection of physical evidence at the crime scene as well as the testing and analysis of the evidence at the forensic laboratory. The student will learn through lectures, class participation and discussion, and laboratory experiments.

CJS*H229 Crime Scene Investigation 3 credits
This is an orientation course that covers the basics of crime scene investigation, including the crime scene, identifying and collecting evidence, and the capabilities and procedures of the crime laboratory. (fall)

CJS*H234 Computer Security and Data Protection 3 credits
This course is designed to give the student a working knowledge of computer security and data protection. Topics that will be covered include types of attacks on computer systems, risk analysis, strategies to counter these attacks and risks, internet security, hacking, and other criminal activity. (spring)

CJS*H235 Information Warfare and Security 3 credits
This course traces the development of information warfare, terrorism, and espionage as they relate to the computer environment. Topics include the threats to military as well as commercial and economic security. The roles of individuals, corporations, and governments in dealing with information-related attacks will be examined. The problems and remedies associated with the topics will also be examined. (spring)

CJS*H230 Security Management 3 credits
*Prerequisite: CJS*H101 with a grade of "C" or better.* This course examines the functions of an integrated security program from a management perspective. Topics to be discussed include how a security organization is managed, actual situations that may be encountered, the duties of the security director, effective management skills, and the day-to-day management of the security function. (spring)

CJS*H232 Industrial and Retail Security 3 credits
*Prerequisites: CJS*H101 with a grade of "C" or better.* This course examines the responsibilities of industrial security in preventing security related compromises against the company, individuals, and information. Thefts in companies and retail establishments will also be examined. Among other topics to be discussed are sabotage, espionage, physical security, theft prevention, internal control, and techniques of detection, apprehension and prevention. (spring)

CJS*H233 Institutional Security 3 credits
*Prerequisite: CJS*H101 with a grade of "C" or better.* This course is designed to give the student an understanding of the role of security as it applies to public and private institutions, such as hospitals, airports, and government agencies. The student will learn how an institution can be compromised by breaches of security. Topics to be discussed include physical security, internal control, processing clearances, safeguarding classified information, and visitor and area control. (fall)

CJS*H241 Correctional Counseling I 3 credits
*Prerequisite: CJS*H101 with a grade of "C" or better.* This course is an introduction to various concepts, principles, and techniques of counseling as applied by trained professionals in the correctional setting. Group methods, evaluation, and therapeutic Environments will be examined as a means of promoting the understanding of the counseling process. Discussions will include the various counseling models and the history of counseling in correctional institutions and the community. (fall)

CJS*H244 Community Based Corrections 3 credits
*Prerequisite: CJS*H101 with a grade of "C" or better.* This course will examine alternatives to incarceration as viable sentencing options. Topics will include: the development of community corrections, parole, diversion, halfway houses, community service, house arrest, and electronic monitoring. The role of the victim in the correctional process will also be discussed. (spring)

CJS*H246 Juvenile Corrections 3 credits
*Prerequisite: CJS*H101 with a grade of "C" or better.* This course presents the correctional aspects of the history, philosophy and development of the juvenile justice system. Topics to be discussed include the rights of juveniles, alternatives to incarceration, incarceration, treatment methods, and current and future trends. (fall)

CJS*H255 Ethical Issues In Criminal Justice 3 credits
 This course is designed to give the student an understanding of the necessity for high standards of ethical and moral behavior on the part of the law enforcement officer. Material will include the consequences of unethical and immoral behavior on the part of the law enforcement officer. Topics include gratuities, favoritism, temptations, dishonesty, abuse and misuse of authority. (fall)

CJS*H261 Victim and Offender Mediation 3 credits
*Prerequisite: CJS*H101 with a grade of "C" or better.* The process of victim and offender mediation and reconciliation is examined in this course. The effectiveness of the process in the offender rehabilitation will be discussed. Topics to be discussed include conflict resolution, bringing the victim and offender together, restitution of losses, reconciliation, mediation, and conflict management. (spring)

CJS*H280 Victimology 3 credits
*Prerequisite: CJS*H101 with a grade of "C" or better.* This course is a study of crime, its causes, and effects from the victim's perspective. The course looks at victim precipitation, restitution, and the varied involvement in, and consequences of, crime on the victim. Major perspectives on victimization as well as patterns of victimization will be analyzed. (spring)

CJS*H293 Criminal Justice Cooperative Work Experience 3 credits
*Prerequisite: 12 credits in CJS*H courses, with grade of "C" or better.* Cooperative Work Experience in Criminal Justice is essentially cooperative training between the school and agency. This required course introduces the student to a specific field in the Criminal Justice system. The course consists of: 1. Two-hour Professional Development Workshop 2. Minimum 145-hour (volunteer) or 225-hour (paid) Cooperative Work Experience 3. Weekly one-hour Co-op Seminar (fall/spring)

DANCE

Liberal Arts and Behavioral/Social Sciences Division

The Division of Liberal Arts and Behavioral/Social Sciences encourages students to register for dance courses in order to develop appreciation of, and skills in, the performance arts. Some of the courses are required in career programs; others are designed for students' interests and personal development. Consultation with the dance advisor will help determine specific needs. Dance courses, except for Dan*H101, are studio courses with a focus on movement. The history and theories of these dance genres are included experientially in class and through reading and writing assignments outside of class. For these studio courses, students must be physically able to perform the skills required in a dance class.

DAN*H101 History & Appreciation of World Dance 3 credits

World Dance is designed to introduce students to dance in its creative, cultural and historical aspects. It will explore "a number of important ways in which dance functions in human societies—always keeping in mind that while dance is a universal human activity, it does not play the same role in every culture." (Grauer) This course includes seminar, video-viewing, and movement activities.

DAN*H102 Ballet I: Renaissance to Romantic 3 credits

Ballet from the Renaissance to the Romantic period provides students with a basic understanding of the fundamental principles of ballet technique, encourages students to achieve a level of self-discipline and physical control, and instills an appreciation of the historical contributions of ballet to the overall development of dance as an art form. Studio course.

DAN*H109 Ballroom I 1 credit

This course is designed to introduce students to the history, evolution, music, steps, and stylings of ballroom dancing. Three standard style dances, Tango or Swing, the Waltz, and the Foxtrot and three Latin style dances, the Rhumba, the Salsa, and the Cha, Cha, Cha, will be explored. Studio course.

DAN*H110 Rhythm Tap 1 credit

This course is designed to introduce students to the rhythm tap genre—a collage of sound produced by using taps and body as an instrument. The cultural and historical perspectives of rhythm tap will be discussed. Studio course.

DAN*H111 Jazz I: Afro-Caribbean/American 3 credits

Afro-Caribbean and American Vernacular Jazz Dance is designed to introduce students to the origins of jazz dance in America. Study emphasizes African and Caribbean, as well as "street" and "ballroom" influences. Basic skills of jazz movement, jazz music, and rhythmic awareness are included. Studio course.

DAN*H112 Jazz II: Broadway and Film 3 credits

No prerequisite. Musical Theater and Film Dance is designed to segue from American Vernacular Jazz Dance into concert jazz dance and Broadway dance. It continues with the historical (1930's-2000's) and cultural perspective particular to this American dance genre as well as its differentiating styles and techniques. Studio course.

DAN*H113 Modern I: Pioneers of America 3 credits

Pioneers of American Modern Dance is designed to introduce students not only to the basic techniques of modern dance, but also to the social, historical, and cultural changes of the twentieth century that made America ripe for new dance forms. Important figures in the dance world from the turn of the century to 1940 will be presented, along with their techniques, theories of movement and compositional ideas. Exposure to this study will enable the students to integrate the thought behind the movement with the action. Studio course.

DAN*H118 Dance Pedagogy for Early Childhood
(also listed as ECE*H118) **1 credit**

This course is designed to introduce students to the basic techniques and methodology for teaching dance to children, ages 2-5. Using the standards established by the State of Connecticut and the National Dance Education Organization, appropriate content for dance classes will be examined. We will view the dance class from a developmental perspective, identifying appropriate movement activities and strategies for teaching.

DAN*H140 Pilates/Wellness
(also listed as HPE*H140) **1 credit**

This course focuses on the quality of movement, posture and breathing by increasing strength, flexibility, and balance. The holistic perspective includes physical awareness, cognitive reflection, nutrition, and insights from feelings and focuses on mind-body centering. Pilates/Wellness is designed for the dancer, athlete, health professional or persons interested in overall well-being. This class meets the first ten weeks of the semester. Comfortable clothing is necessary.

DAN*H175 Kinesiology for Dancers **3 credits**

This course, designed especially for those involved in dance, athletics or somatics, looks at the structure and function of the human body. Anatomical and mechanical principles are analyzed. We will focus on the musculoskeletal system as a mechanism for motion. Students are expected to have a foundation in dance or other body movement. This course will satisfy the science requirement for dance majors.

DAN*H202 Ballet II: Classical to Contemporary **3 credits**
*Prerequisite: DAN*H102.* Ballet from the Classical to Contemporary periods is designed to further the student's study of the technique of classical ballet and its history in the twentieth century. Studio course.

DAN*H209 Ballroom Dance II **1 credit**
It is strongly advised that students take DAN*H109 Ballroom I prior to taking this course or have a foundation in ballroom dance. This course is designed to expand students' study of the history, evolution, music, steps, and styles of ballroom dancing. Three standard style dances, Swing, the Waltz, and the Foxtrot, and three Latin style dances, the Rumba, the Salsa, and the Tango, will be covered.

DAN*H213 Modern Dance II: Second Generation America **3 credits**
*Prerequisite: DAN*H113 or permission of instructor.* This course encompasses the techniques, theories and philosophies of movement as presented by America's second generation from Cunningham to Alvin Ailey. The social and cultural changes that influenced this period's dance also will be explored. Exposure to this study will enable the student to integrate the thought behind the movement. Studio course.

DAN*H221 Repertory/Ensemble I **3 credits**
Prerequisite: Permission of instructor. Modern, Jazz or Ballet compositions by faculty or renowned choreographers will be taught, rehearsed and presented in concert. Performance skills of projection, clarity, staging, spacing and truth to choreographers' techniques will be practiced. Works for repertory may include Charles Weidman's Brahm's Waltzes, Anna Sokolow's Rooms, Balanchine's Tarantella, and Pilobolus' Improvisational Techniques. Studio course. Additional rehearsals required.

DAN*H222 Choreographic Principles/Ensemble I **3 credits**
Prerequisite: Permission of instructor. Choreographic Principles/Ensemble is designed for students to discover sources of movement and develop the tools for structuring movement in time and space. It includes assigned composition problems and structured movement improvisation. Students may find their own personal statement in movement and develop a solo dance, and/or they may focus on making a group work. Students develop creative decision-making in working with a group. Elements of performance—costume, decor, lighting, staging—will also be explored and executed in formal concert. The Ensemble is the performing arm of the College. Studio course. Additional rehearsals required.

DAN*H224 Choreographic Principles/Ensemble II **3 credits**
*Prerequisite: DAN*H222 and permission of instructor.* This course is designed for students to expand their knowledge of movement and dance and to continue to develop the tools for structuring movement in time and space. It includes assigned compositional problems and structured movement improvisation. Students will continue to explore their own personal statement in movement and develop solos and/or group work. Students will continue to develop and demonstrate creative decision-making in working with an ensemble, both choreographically and in production. Tools and vocabulary continue to be offered in an environment open to creative communication. Elements of performance (costume, decor, lighting, staging) and production (publicity, press releases, stage and house management, scheduling) will be explored also. Participation in Dance Concert is mandatory.

DAN*H225 Repertory/Ensemble II **3 credits**
*Prerequisites: DAN*H221 and permission of instructor.* This course is designed to expand students' study of dance compositions by faculty and renowned choreographers who will teach their work. Modern dance is emphasized but works may be from the jazz dance or ballet genre. The studied works will be videotaped and then rehearsed by the instructor. Students, working as an ensemble, will present these works in formal or informal concert. Performance skills of projection, clarity, staging, spacing, and truth to choreographers' intent and technique will be further practiced. Students will continue to develop and execute production skills related to production. Participation in Dance Concert is mandatory.

DAN*H231 Jazz III: Musical Theater Dance **3 credits**
*Prerequisites: DAN*H112 or previous dance training.* This course will focus on the three most influential directors/choreographers of the 20th century: Jerome Robbins, Michael Bennett and Bob Fosse. It will reconstruct not only the dancing but the character intent in a signature piece from West Side Story (Jerome Robbins), A Chorus Line (Michael Bennett) and Chicago (Bob Fosse). It will also emphasize the dramatics that were infused into each piece and how the emergence of the director/choreographer reshaped the American musical to what it is today. Coursework will compare the differences and the similarities of each piece and its construction. The three works will be informally performed by the students at the end of the course as part of their final exam. Reading and writing components are done outside of class. Extra hours in the studio may be required. Students taking this course are expected to have a foundation in dance.

DAN*H232 Ballet III **2 credits**
*Prerequisite: DAN*H202.* This course continues to provide students with an understanding of the fundamental principles of ballet technique, to encourage students to achieve a level of self-discipline and physical control, and to instill an appreciation of the historical contributions of ballet to the overall development of dance as an art form. Reading and writing component are done outside of class. Extra rehearsal hours in the studio are required.

DAN*H233 Modern Dance III: Technique/Humphrey-Limon **2 credits**
*Prerequisite: DAN*H113 and or DAN*H213.* This studio course is designed to continue students' study in the Humphrey-Limon techniques of modern dance. This twentieth century technique is the foundation of the modern dance study at this college. Presented along with Doris Humphrey's and Jose Limon's techniques will be their theories of movement and compositional ideas. Exposing the student to this study will enable him/her to integrate the thought behind the movement with the action. Extra rehearsal hours in the studio are required.

DIGITAL ARTS TECHNOLOGY

Liberal Arts and Behavioral/Social Sciences Division

DAT*H101 Introduction to Digital Arts 3 credits
Prerequisite: CSA*H105 or equivalent experience. This course is an introduction and overview of the digital arts. The basic elements, components and skills required for digital art development and production will be defined and explored. Topics include; applications of digital arts, presentation software, visual design principles, digital media design, Web design, configuring a multimedia system, emerging technologies, multimedia components, and interactive multimedia development.

DAT*H104 Multimedia Authoring I 3 credits
Prerequisite: DAT*H101. Multimedia Authoring I is an introduction to the planning, development and management of multimedia software projects, Interaction Design, and algorithm analysis. Topics include; multimedia and instructional design, multimedia and interaction design, multimedia and the WWW, arrays, functions and methods, events and event handlers, objects, logic structures, repetition structures, programming and scripting languages, and variables.

DAT*H106 Digital Design 3 credits
Prerequisites: DAT*H101. This course explores the uses of fundamental visual design principles in emerging technologies used to design and develop interactive electronic documents such as multimedia databases, multimedia electronic books, applications for hand-held devices, and other technologies. Topics include; elements of design, principles of design, XML, and delivery engines.

DAT*H108 Digital Imaging I 3 credits
Prerequisite: DAT*H101. Digital Imaging I provides an in-depth study of digital image files and their uses in the realm of digital graphics, imaging and video. Topics include; alpha channels, composition and lighting, color theory, data compression, filters, raster graphics, vector graphics, gradients, layering, screen resolution and bit depth, and video display formats.

DAT*H110 Digital Video Production I 3 credits
Prerequisite: DAT*H101. Digital Video Production I is an introduction to the three phases of video production; pre-production, production, and post-production. Students will script, storyboard, shoot, and edit original short films. Topics include; alpha channels, aspect ratio, audio production, broadcast standards, computer monitors vs. video monitors, camera techniques, composition, compositing, compression, lighting, rolling credits, transitions, titles, and project management.

DAT*H116 Interactive Media Design 3 credits
Prerequisite: DAT*H104. Interactive Media Design is a practical and theoretical approach to the development and application of interactive digital media for desktop, portable devices, and Web-based applications. Learners will utilize the latest technologies to design, develop and present interactive digital media content. Topics include; principles of interaction design, human-computer interaction, intermediate JavaScript and XML programming, and developing interactive PDF documents.

DAT*H205 Multimedia Authoring II 3 credits
Prerequisite: DAT*H104. Multimedia Authoring II is an intermediate-level course in the application of advanced project development tools used in the creation of interactive multimedia for the edutainment, entertainment and Web industries. Students will learn and apply techniques used to create interactive multimedia for broadcast, electronic games, and WWW applications. Topics include; algorithm analysis, animation, Interaction Design and interactivity, introduction to Human-Computer Interaction, keyframing and tweening, objects and events, Lingo scripting, timeline-based authoring, and Shockwave.

DAT*H212 3D Graphics & Animation I 3 credits
Prerequisite: DAT*H108. The 3D Graphics & Animation I course is an introduction to the design and application of digital character modeling and animation. Students will learn to design 3D modeled objects and examine and apply fundamental 2D and 3D graphic algorithms. Topics include; animation, camera and rendering, extrusions, lighting, modeling, polygons and primitives, surfaces, terrain, texture maps, transforms, and vectors.

DAT*H215 Multimedia Web Authoring 3 credits
Prerequisite: DAT*H205. Multimedia Web Authoring utilizes the latest software technologies and methodologies to develop and deliver complete interactive multimedia software systems for Web-based applications. Topics include; advanced algorithm analysis, complex problems in Human-Computer Interaction, and advanced JavaScript and Action Script programming.

DAT *H218 Electronic Music Composition/ Audio Technology I (also listed as MUS*H218) 3 credits
Prerequisite: CSA*H105 and permission of the instructor. This course is an introduction to the art and techniques of electronic music and audio production. The history, elements, and tools of electronic music and audio will be defined and explored. Topics include; acoustic theory, analog and digital audio principles, composition, recording engineering techniques, sound sampling, electronic synthesis, MIDI, and audio for multimedia and the World Wide Web.

DAT*H219 Electronic Music Composition/ Audio Technology II 3 credits
Prerequisite: DAT*H218/MUS*H218. This course provides intermediate instruction in digital synthesis, digital sequencing software, and electronic composition methods. Students will complete a series of directed and independent compositional projects in a variety of styles. Topic include; construction of timbres, additive and subtractive synthesis, digital sampling, signal processing, and algorithmic composition.

DAT*H220 Acoustics and Sound Design 3 credits
Prerequisite: DAT*H101. The advanced functions of the properties of sound, human hearing, electro-acoustic instruments, digital sound reproduction systems, sound synthesis, and psychoacoustics are examined. Students will develop and participate in a number of practical sound design and audio engineering projects.

DAT*H224 Digital Video Production II 3 credits
Prerequisite: DAT*H110. This course examines advanced project development methods and tools for video production. Students will study and apply the processes involved in transforming a concept to a finished video product. Topics include; analysis, budget, copyright, scripting, storyboarding, sequencing, pre-production, production, and post-production. The learner will design, script, produce, edit, and complete an original video project.

DAT*H226 Motion Graphics for Film & Video 3 credits
Prerequisite: DAT*H110. The study and application of state-of-the-art special effect techniques used in film and video industries will be explored. Topics include; compositing of multiple layers, masks and mattes, advanced motion controls, and advanced color keying.

DAT*H230 Digital Imaging II 3 credits
Prerequisite: DAT*H108. The advanced study of the design and manipulation of digital graphic and image files will be realized through a series of experiential projects. Topics include; photo retouching, drawing with vector paths, creating special effects with multiple layer effects, and designing images for interactive electronic media.

DAT*H234 3D Graphics & Animation II 3 credits
Prerequisite: DAT*H212. This course will explore advanced techniques for character modeling and the design of virtual space. Topics include; lighting and atmospheres, environmental structures, organic modeling, and character construction. The learner will design, model, and animate a complete 3-dimensional virtual world.

DAT*H237 Principles of Sound Recording 3 credits
Prerequisite: DAT*H218 or MUS*H218. This course presents an in-depth study of the techniques and methodologies used in studio and live recording. In addition to classroom assignments and exercises, students will be expected to complete field work resulting in the recording, editing, and mastering of a live or studio project. Topics will include two-track and multi-track recording, studio acoustics and design, analog and digital mixing consoles, microphone placement techniques, signal processors, and studio session procedures.

DAT*H240 Multimedia Authoring III 3 credits
Prerequisite: DAT*H205. This course explores advanced multimedia systems and the theoretical and practical issues in designing interactive systems. Topics include; compression techniques, synchronization, user interface accessibility, indexing and retrieval techniques, operating system support for digital audio, video, and animation file formats, as well as network and transport protocols for multimedia. Emphasis will be placed on current design and delivery issues, software implementation and discussion of future directions.

DAT*H250 Digital Arts Photography 3 credits
 This course in Digital Photography is designed to develop your skills in pixel based photographic design and printing. The dream of filmless photography has finally become a reality. Cameras, printers, inks and paper have evolved that are able to not only match traditional continuous tone photographic quality, but can also extend traditional possibilities. In this first introductory course in digital photography, we will use this new found power to create, edit, post and share our images electronically. As a studio art course, you will be assessed not by tests or writing papers but mainly by your visual work leading to a final portfolio of images. Your ability to grow in the medium, try on new ideas, learn to communicate using the language of this medium, to appreciate ideas and trends in historical as well as contemporary photographic art will all contribute to your grade.

DAT*H290 Digital Arts Project 3 credits
Prerequisite: DAT*H224 or 230 or 240. Completion of a significant project under the guidance of an advisor in an area of mutual interest such study terminating in a deliverable software/media product with technical documentation. The project must be in an area directly related to one of the three program options.

DRUG AND ALCOHOL RECOVERY PROGRAM (DARC)

Liberal Arts and Behavioral/Social Sciences Division

DAR*H101 Issues in Drug and Alcohol Abuse 3 credits
Prerequisites: Eligibility for ENG*H101. This course will introduce students to the substance abuse treatment field and discuss DARC admission and certification requirements. Students will explore key topic areas such as models of recovery; history of legislation and regulation; self-help and evidenced-based approaches to recovery, ethics, and confidentiality. Public health issues related to substances will be investigated, including trends in substance use, co-occurring disorders, advertising of tobacco and alcohol, costs to society, and continuum of care from prevention to aftercare.

DAR*H111 Addiction Counseling I 3 credits
Prerequisite: Eligibility for ENG*H101. Students will learn, practice, and develop counseling skills such as attending, reflecting, active listening, interviewing, and mirroring as it relates to addictions counseling. Students will learn theories that are fundamental to addiction counseling and understand the relationship of theory to skills. Students will reflect on their roles as counselors and define the qualities, knowledge base, and skills essential to becoming a competent, ethical, culturally-aware counselor-in-training.

DAR*H112 Group Counseling Theory and Techniques 3 credits
Prerequisite: Eligibility for ENG*H101. Students will be introduced to the concepts and theories of group counseling and group dynamics in the addiction field. Types of groups, group formation, and stages of group development, transitions, and termination of groups will be discussed as well as the ethical aspects of group work. Through a combination of didactic and experiential learning, students will have the opportunity to examine their own performances as group members and facilitators.

DAR*H158 Biology of Addiction 3 credits
Prerequisite: Eligibility for ENG*H101. Students will be introduced to the basic pharmacology of drugs of abuse, and drug classification as well as the process of neurotransmission and brain functioning when drugs are introduced to the human body. Discussion of how each class of psychoactive substances alters neurotransmission and homeostasis will occur. The course examines the consequences of short- and long-term substance use, abuse, and addiction on all major bodily systems and the fetus.

DAR*H220 Co-Occurring Disorders Counseling 3 credits
Prerequisite: Eligibility for ENG*H101. The purpose of this course is to educate students about the principles, assessment instruments, strategies, settings, and models for treating clients with co-occurring disorders in the addiction treatment setting. This course will provide education and training on models for treating co-occurring disorders, assessment practices, development of treatment plans, and counseling strategies that may be used in inpatient and outpatient settings.

DAR*H213 Addiction Counseling II 3 credits
Prerequisite: Eligibility for ENG*H101. This course builds upon the theoretical base presented in Addiction Counseling I and will encourage further development of encouraging, paraphrasing, summarizing and reflecting of feelings as they relate to conducting intake interviews, treatment planning, counseling, and the discharge process. Students will also learn about complex issues which include GLBT populations, HIV/AIDS, domestic violence, eating disorders, relapse prevention, specialized self help groups, ethical behavior, and multicultural competencies.

DAR*H251 Counseling Internship I 6 credits
Prerequisites: DAR*H101, 111, 112, 158; Passing grade of "C" or better for ENG*H101 and permission of the program coordinator. Students will spend 15 hours per week in a substance abuse treatment facility under the joint supervision of the DARC program Coordinator and a supervisor at the facility and attend a seminar once per week. Students will observe, practice, and develop competency in the 12 core functions of addiction counseling. As students develop increased competence, they will progress from active observers to co-counselors and then to counselors. Students will continue academic study during a weekly seminar. Students will be expected to reflect on their field work, participate in clinical supervision and peer group interaction. (fall only)

DAR*H252 Counseling Internship II 6 credits
Prerequisite: Passing grade of "C" or better in DAR*H251; Passing grade of "C" or better for ENG*H101 and permission of DARC program coordinator. DAR*H251 and DAR*H252 must be completed in consecutive (Fall /Spring) semesters. A continuation of DAR*H 251, students will continue their field placements for 15 hours per week in the same substance abuse treatment facility. Students will refine their counseling skills and assume increased responsibility for implementing the transdisciplinary foundations and competencies required of addiction counselors. During the semester, students will function as a primary addiction counselor for one or more clients. The classroom component (weekly seminar) of this internship will prepare students for the certification exam and case presentation as well as provide for ongoing clinical supervision, personal reflection, and growth. (spring only)

EARLY CHILDHOOD EDUCATION

Liberal Arts and Behavioral/Social Sciences Division

ECE*H101 Introduction to Early Childhood Education 3 credits
 A study of the historical, philosophical, and social perspectives of early care and education. Emphasis will be on modern development and trends, along with an understanding of the organization and composition of early childhood education settings, which include curriculum materials, learning environments and the teacher's role. Four three-hour observations of various types of early childhood programs and field trips are required.

ECE*H103 Creative Experiences for Children 3 credits

This course is designed to study the concept of creativity and the creative process as it applies to art and play for young children. At the completion of this course, the student will be able to set-up a creative play environment, facilitate children's creative play and develop an art philosophy and creative art program for children.

ECE*H106 Music and Movement for Children 3 credits

Prerequisites: ECE*H101. This course is designed to have students acquire skills in order to plan and implement creative music and movement education experiences for young children. Areas of exploration will include singing, listening to music, rhythmic activities, chants, creating music, using instruments with children, multi-cultural music, creative dance and movement, musical games, music for children with special needs, and using music spontaneously in the classroom. The main goals of the course are to develop an understanding of the importance of music and movement education experiences in an early childhood environment, the role that music plays in the growth and development of young children, and how these experiences can be creatively planned, implemented, and integrated throughout the daily curriculum.

ECE*H109 Science and Math for Children 3 credits

This course is designed to help students explore a variety of math and science experiences suitable for use with young children. Math and science concepts are presented in relationship to everyday objects and experiences. Students will consider how math and science concepts are embedded in classroom, family, and familiar experiences as well as how to support development of related concepts and skills.

ECE*H118 Dance Pedagogy for Early Childhood (also listed as DAN*H118) 1 credit

This course is designed to introduce students to the basic techniques and methodology for teaching dance to children, ages 2-5. Using the standards established by the State of Connecticut and the National Dance Education Organization, appropriate content for dance classes will be examined. We will view the dance class from a developmental perspective, identifying appropriate movement activities and strategies for teaching. There is no prerequisite for this class.

ECE*H141 Infant/Toddler Growth and Development 3 credits

Prerequisites: ECE*H101 *a physical examination is required.* An introduction to the care and teaching of infants and toddlers, which emphasizes the interrelationship between social, emotional, cognitive, physical, and language development. Age appropriate curriculum strategies will be based on developmental theories. Components of a high quality program will be explored. Students will be required to fulfill 8 weeks (4 hours per week) of field placement work with toddlers as well as complete three, 4-hour observations of infants child care setting. Placement is determined by the coordinator.

ECE*H176 Health, Safety and Nutrition 3 credits

The relationship between health, safety, nutrition, and child development will be explored. Emphasis will be on the strategies needed to implement a safe, healthy, and nutritionally sound program. Integration of these areas into the total curriculum will be examined.

ECE*H206 Administration and Supervision of Early Childhood Programs 3 credits

Prerequisites: ECE*H101 *or permission of the Early Childhood Education Coordinator.* An examination of the multi-dimensional role of the early childhood program director/administrator. Administrative styles, management tools, and interpersonal skills that contribute to effective leadership will be explored. Topics such as CT State licensing regulations, NAEYC accreditation, director certification, public policies, and professionalism will be discussed. (spring)

ECE*H210 Observation, Participation and Seminar 3 credits

This course is designed to help students to observe, interpret, and assess children's behavior and developmental characteristics and to increase awareness of typical and atypical patterns of behavior, as well as to develop learning plans. Observation and participation placements are provided for the study of young children at the discretion of the coordinator. The students will observe and participate in an accredited center to gain experience in working with young children. In weekly seminars, students will focus on issues related to observing and understanding children's development. Students will spend a total of 60 hours, (4 hours per week) observing, documenting, and interacting with young children in the classroom.

ECE*H215 The Exceptional Learner 3 credits

Prerequisites: ECE*H101, PSY 203 *or permission of the Early Childhood Education Coordinator.* The study of the "exceptional child" with emphasis on the history, laws, concepts, practices, and terminology used by professionals in the field. Accommodations and techniques used by teachers in an inclusive classroom will be covered. An observation of a preschool special education class is required.

ECE*H222 Methods and Techniques in Early Childhood Education 3 credits

Prerequisites: ECE*H101, 103, 106, 176, and 231, ENG*H101, Psy*H111, Soc*H101, *should be taken concurrently with ECE-H291.* The study of the knowledge and skills needed to plan, implement, and evaluate a developmentally and culturally appropriate curriculum. Experiences will focus on the design of the learning environment, the interaction between teacher, child and family, classroom management, and the fostering of opportunities to enhance the development of the whole child. Guidance of children's behavior will be explored. Written permission is required before enrollment. (spring)

ECE*H231 Early Language and Literacy Development 3 credits

Prerequisites: ECE*H101. An introduction to language and literacy development in the young child. Exploration of the early childhood language arts curriculum which includes speaking, listening, writing, and reading skills will be examined. Emphasis on the influence of a child's cultural background and experiences on emerging literacy development will be explored. Creation of a literacy-rich environment that engages children in developmentally appropriate language arts experiences will be included. Field trips are required. (spring)

ECE*H290 Student Teaching I 3 credits

Prerequisites: ECE*H101, 103, 106, 176, and 231, ENG*H101, Psy*H111, Soc*H101. *A physical examination by a doctor and a criminal background check are required before starting ECE*H290.* This course is designed to develop specific skills needed by the student in order to assume the responsibilities in a classroom. Through guided supervision in the classroom and seminars, the student will gain the needed experience by putting theory into practice. The coordinator will place students in the College's Child Development Center. Written permission is required before enrollment. Topics to be explored will include classroom management, daily schedules, curriculum and developmentally appropriate planning. The student is required to fulfill 120 hours of work experience during the semester. (8 hours per week minimum) (fall)

ECE*H291 Student Teaching II 3 credits

Prerequisites: ECE*H101, 103, 106, 176, 231, and 290, ENG*H101, PSY*H111, 204, SOC*H101. This is a continuation of ECE*H290. During this phase of the work experience, the student will concentrate on working directly with young children. The overall objectives are for the student to be able to manage a classroom independently, plan, organize, execute, and evaluate classroom activities on a weekly basis, and be able to critique effectively one's role in the classroom. The student will be under the supervision of an on-site supervisor and the College instructor. Individual placements are under the direction of the Coordinator which includes eight hours in the Child Development Center and four hours in another setting. Written permission is required before enrollment. The student is required to fulfill 192 hours of work experience for the semester. (12 hours per week minimum) (spring)

ECONOMICS Business Division

ECN*H101 Principles of Macroeconomics 3 credits
An introduction to the basic structure of the United States economic system is presented. Topics include: types of economic systems, characteristics of capitalism, supply and demand, inflation and unemployment, the federal reserve system, and economic policy.

ECN*H102 Principles of Microeconomics 3 credits
Prerequisite: ECN*H101. An introduction to the problems of scarcity and resource allocation as it pertains to households and firms. The course centers on production and cost analysis in the four major types of industry models. Topics include supply and demand, elasticity, consumer choice, government in the microeconomy and price determination under various market conditions.

ECN*H130 Consumer Economics 3 credits
Study concerns the proper management of personal income and expenditures. Topics include: a study of inflation and business cycles, commercial and savings accounts, budgets, charge accounts, installment buying use of credit, home ownership, insurance and taxes.

ECN*H250 Money and Banking 3 credits
This course examines monetary theory and policy with special attention to the monetary system, commercial banking, the thrift industry, central banking, and capital markets.

ELECTRONIC ENGINEERING TECHNOLOGY Science, Technology, Engineering & Mathematics Division

EET*H102 Electrical Applications 3 credits
*Corequisite: MAT*H137.* An introduction to the fundamental concepts of electricity and electronic technology. A study of DC and AC electrical circuits with the emphasis on instrumentation, measurements, devices, and application of theory to practical systems. Topics covered include electrical circuits, applied electrical technology, transformers, motors and generators, electronic fundamentals and devices. Two class and two laboratory hours weekly.

EET*H104 Electronic CAD and Fabrication 1 credit
Prerequisite or Corequisite: Some experience with WINDOW operating system. Introduction to the basics of double sided Printed Circuit Board construction and soldering components to these boards. completion of a small fabrication kit including PC Board, leading to better physical understanding of PCB's as a prerequisite to using OrCAD Layout software. The CAD then moves into the CAD laboratory to study the concepts of schematic capture (OrCAD CAPTURE) into a NETLIST and on to PCB layout. Three laboratory hours weekly.

EET*H110 Electric Circuits I 4 credits
*Corequisite: MAT*H172.* The fundamentals of direct current circuits are established. Emphasis is placed on the characteristic description of circuit behavior. Ohm's law and Kirchhoff's law are used to determine circuit characteristics. Circuit rules, methods and theorem are covered extensively. Resistance, capacitance and transient responses are introduced. Formal laboratory report writing is required. Four class hours and two laboratory hours weekly.

EET*H114 Electric Circuits II 4 credits
*Prerequisites: EET*H110. Corequisite: MAT*H185.* The application of circuit analysis techniques acquired in Electric Circuits I are extended to circuits excited by AC sources. Emphasis is placed on solving circuit problems using complex numbers and phase diagrams. Topics include: inductance, transients, filter theory, mutual inductance, transformer theory, and an introduction to polyphase circuits. Formal report writing is required. Three class and two laboratory hours weekly.

EET*H126 LabVIEW 2 credits
*Corequisite: MAT*H172.* This course will introduce the student to data acquisition using the computer. Students will learn how to create "virtual instruments" using LabVIEW™, a powerful graphical programming language for data acquisition and manipulation. Emphasis is placed on standard programming structures, real-time data acquisition, mathematical manipulation and graphing. Four laboratory hours

EET*H136 Electronics I 4 credits
*Prerequisites: EET*H110. Corequisites: EET*H114, MAT*H185.* Semiconductor physical concepts and P-N junction theory is established and applied to basic devices such as diodes, bipolar junction transistors, and field effect transistors. Circuit applications of these and other special devices are studied, with an emphasis on operating principles and analysis techniques. Three class and two laboratory hours weekly.

EET*H208 Applied Circuit Analysis 3 credits
*Prerequisites: EET*H126, 114, MAT*H185.* The analysis of RLC circuits using classical calculus for inputs which are both sinusoidal and non-sinusoidal are examined. Resulting first and order differential equations are solved using classical methods and by use of Laplace transforms. Basic derivatives and integration are taught as they apply to RLC circuitry. Three class and three laboratory hours weekly. This course may be substituted for MAT*H232 for Electrical students only.

EET*H232 Electronics II 4 credits
*Prerequisite: EET*H136. Corequisites: MAT*H185.* Characteristics of small signal amplifiers using BJT's and FET's are examined, and followed up with a study of linear op-amp circuits. Comparators and Schmitt Triggers using op-amps are also explored. Basic characteristics of power amplifiers and oscillators are studied, and the operation of the thyristor family of devices is introduced. Three class and three laboratory hours weekly.

EET*H242 Fiber Optics 3 credits
*Prerequisites: EET*H136, 252, PHY*H122.* The course will cover the basics of fiber optics, how it is manufactured, its applications and fiber performance. The different types of construction of fiber optic cabling will be discussed and illustrated, with the advantages and disadvantages of each. Different types of connectors will be covered in both the classroom and the laboratory with the student making many of the actual connections. Measurement of the transmission characteristics of cables will be measured in the laboratory using a Time Domain Reflectometer. The use of single mode and multimode cabling relative to the type of transmission will be discussed. Three class and three lab hours weekly.

EET*H251 Electronic Instrumentation 3 credits
*Prerequisite: EET*H126, 114. Corequisites: EET*H232, 252.* A study of the operating principles of electronic and electrical instruments. Both analog and digital instruments are covered. Sources of instrument errors and standards of measurement are included, along with the design of VOM circuits and basic electronic instruments. Also included is an introduction to LABVIEW (Basic Virtual Instrument Programming) and data acquisition. Three class and three laboratory hours weekly.

EET*H252 Digital Electronics 4 credits
*Corequisites: EET*H114.* The study of number systems, Boolean algebra, logic gates and combinational circuits. This study provides the basis for investigating the operation of sequential circuits including flip-flop applications. Design of arithmetic circuits adders and subtractors and BCD are studied. Decoders, encoders, multiplexers and demultiplexers are included as an application of the basic gates. Use of Electronic WorkBench software to solve logic problems. Three class and three laboratory hours weekly.

EET*H253 Advanced Digital Electronics 3 credits

Prerequisite: EET*H252. A continuation of digital circuit design. Includes counters (asynchronous, synchronous types), multi-bit shift registers, logic families A/D and D/A converters, and code converters. Static and dynamic RAM memory circuits used in computers are studied along with ROMs, masked PROMs and erasable PROMs. CPLD design is explored extensively. Schematic entry and state diagram are methods learned to program a Xilinx CPLD. VHDL is introduced. Three class and three laboratory hours weekly.

EET*H256 Microprocessors 4 credits

Prerequisite: EET*H252. A study of the fundamentals of Microchip Corporation's PICTM microcontroller architecture and high level programming language using Micro Engineering Lab's PIC BASIC PRO compiler. Programming concepts include looping, decisions, time delays, interrupts, and LCD display. Hardware is addressed via the M. E. Labs X1 experimenter board. The PBPro compiler is run within Microchip's MPLAB Integrated Development Environment™ allowing full simulation capability as well as use of the Microchip ICD2 In Circuit Debugger for observing hardware operation in a very controlled manner. Three class hours and three laboratory hours weekly.

EET*H268 Control Systems 3 credits

Prerequisites: EET*H126, 114, 232, 252, MAT*H185. An introductory course which investigates primarily electro-mechanical control systems. Discrete control systems using relay logic and programmable controllers (PLC's) are studied. Open and closed loop analog speed control systems are closely investigated. Motion, work EVSelope, axis of movement and programming lead up to a project with a working robot. Three class and three laboratory hours weekly.

EET*H294 Projects 2 credits

Prerequisites: EET*H104, 232, 252. Provides the opportunity to construct a project of interest to the student with the approval of the instructor. The course involves research, preparation, and a written report for the project, as well as full implementation, testing, fabrication, troubleshooting, and final demonstration of the project. Schematics and PCB layouts will be prepared using OrCAD SDT and OrCAD PCB tools. Four laboratory hours weekly.

**EMT-PARAMEDIC
Allied Health/Nursing/Physical Education****EMT*H100 Emergency Medical Technician-Basic (EMT-B) 6 credits**

This course includes classroom and clinical experiences and provides students the opportunity to develop the knowledge and skills required for EMT-B National Certification. Emphasis is placed on patient assessment, clinical signs and symptoms, pathophysiology and pre-hospital care of patients. Areas of instruction include CPR, airway essentials, assessment and care of trauma and medical patients including infants, children and the elderly, rescue operations, hazardous materials and pharmacological interventions. Clinical rotation in an emergency room is required.

Health Requirements:

Students will be required to submit the completed immunization and medical compliancy requirements before participating in the clinical observation component of this program. Students will receive a packet of information describing current college policies from the course instructor.

Criminal Background Checks:

Many clinical sites are now requiring that criminal background checks, be completed on any students who will be attending a clinical rotation at those facilities. Students must follow instructions for obtaining a background check provided to them by the course instructor. Students who are found guilty of having committed a felony/misdemeanor may be prevented from participating in clinical experiences. If you cannot participate in a clinical rotation at an assigned facility, you may not be able to complete the objectives of the course. Specific situations are reviewed by college personnel.

Students are responsible for fees associated with health requirements and background checks.

**ENGINEERING TECHNOLOGY
Science, Technology, Engineering & Mathematics
Division****TCN*H101 Introduction to Engineering Technology 3 credits**

Students will conduct research, including interacting with professionals in the field of Engineering and Technology, to evaluate careers of interest to the student. Student teams will employ technical skills, appropriate software and technology to solve projects related to engineering and technology. They will also evaluate the use of information and technology and how it affects our society. Necessary skills for academic and professional success, such as critical thinking, problem solving, teamwork, study skills, time management and ethics in engineering, will be presented. Students will be required to write a research project and present their findings to the class in an oral presentation.

**ENGLISH
Liberal Arts and Behavioral/Social Sciences Division****ALP/ENG*H063 3 credits**

This course will enhance the student's confidence in expressing ideas and provide practice with sound writing mechanics. Emphasis is placed on practicing the writing process with a focus on rhetorical methods; skills are taught within the context of essay writing. In addition, students will read, critically assess and write as a response to the readings. Library and research techniques are practiced. This course requires a minimum of six (6) hours of outside work per week.

- This course is part of the Accelerated Learning Program combination of ENG*H063 and ENG*H101.
- Placement into the course(s) will be determined by Accuplacer scores: RC 72-82 and SS 72-87.
- Students registered for both CRNs will have the opportunity to receive credit for both courses.
- These courses run in consecutive time blocks: ENG*H101 is the primary course and will be offered first, then ENG*H063 will continue through the second block as a workshop to support the work offered in ENG*H101.
- In the ENG*H063 class, students will prepare for and review questions from ENG*H101, write short papers to reinforce concepts taught in ENG*H101, review drafts, and work on reducing writing errors. Requirements for attendance in either one or both classes will be made on an individual basis.

3 Credits for ENG*H101 and 3 credits for ENG*H063 (not toward graduation). Student MUST receive a C or better (73) to pass this course.

ENG*H096 Introduction to College English 3 credits

Prerequisite: Appropriate score on placement test, or approval from division director or advisor. This course is designed to prepare students for the reading and writing demands in Composition and other college-level courses by integrating reading, writing, and critical thinking. Student writing will focus on understanding, reporting on, reacting to, and analyzing the ideas of others. Texts will serve as models and sources for students to refine their skills in exposition, interpretation, and argumentation. Students learn and practice specific college-level skills through critical reading and writing, class discussions, lectures, group presentations or workshops. This course does not satisfy an English requirement or an elective in any degree program, nor do its credits count toward graduation.

ENG*H101 Composition 3 credits
Prerequisite: "C" or better in ENG*H096 or successful completion of placement tests or recommendation of the Associate Dean of LABSS and instructor. May not be taken concurrently with ENG*H096. This course is designed to introduce students to the importance of writing and to develop their critical thinking, reading, and writing skills. The class will focus on the writing of expository essays, often in response to complex readings. This course will emphasize the necessity of revision as a means of producing college-level writing. Intensive library and research techniques are an integral part of this course.

ENG*H102 Literature and Composition 3 credits
Prerequisite: "C" or better in ENG*H101 or recommendation of the Associate Dean of LABSS and instructor. Students develop skills in understanding and appreciating genres such as fiction, poetry, and drama. Additionally, students apply critical methodologies and investigate relationships between literature and society, thus confirming their skills of analysis and writing. Intensive library and research techniques are an integral part of this course. ENG*H102 is an academic core course.

ENG*H200 Advanced Composition 3 credits
Prerequisite: "C" or better in ENG*H101 or recommendation of the Associate Dean of LABSS and instructor. Students will study audiences, research, and write material for those audiences. Students will be encouraged to freelance some writing during the semester.

ENG*H202 Technical Writing 3 credits
Prerequisite: ENG*H101. This course involves the student in the study and practice of the basic skills and principles of technical writing for business and industry. The practice of writing is emphasized; graphic and design elements including designing visual formats are given secondary emphasis. The course focuses on the fundamental skills and formats of letter/memos, instructions, proposals, reports, and layperson writing (communicating difficult subjects to general audiences). Individual instructors may add other subjects.

ENG*H211 Short Story 3 credits
Prerequisite: ENG*H102 or ENG*H200. This course is a study of the framework and the major movements, writers and works of short fiction. Emphasis is given to the various attempts to portray the response to the complexity of life and to examine the role of literature. It will, further, focus on the study of short prose fiction in order to develop the ability to read and write. The course informs understanding of how literary form suits both an author's and an age's aesthetic.

ENG*H214 Dramatic Literature 3 credits
Prerequisite: ENG *H102 or ENG*H200. The study of dramatic literature, analysis and critical writings about the great plays from the canon of world drama. Assigned readings may include plays by Euripedes, Shakespeare, Molière, Ibsen, Chekhov, Williams or Hansberry.

ENG*H215 Studies in Children's Literature 3 credits
Prerequisites: ENG*H102 or ENG*H200. This course covers selection, evaluation and critical study of books and materials available for children. Assigned readings may include folklore, poetry, fiction, and non-fiction, as well as discussion of outstanding writers and illustrators, past and present.

ENG*H221 American Literature I 3 credits
Prerequisites: ENG*H102 or ENG*H200. Students read and discuss leading writers of America to the Civil War. Assigned readings may include works of the Puritans, Jefferson, Franklin, Cooper, Emerson, Melville or Whitman. Critical and historical analysis is included. The period covered by this course corresponds to the period covered by HIS*H201, U.S. History I.

ENG*H222 American Literature II 3 credits
Prerequisites: ENG*H102 or ENG*H200. Students read and discuss leading writers of America from 1865 through World War II. Critical and historical analysis is included. Assigned readings may include Twain, James, Crane, Frost, Fitzgerald, Hemingway, and Faulkner. The period covered by this course corresponds to the period covered by HIS*H202, U.S. History II.

ENG*H231 British Literature I 3 credits
Prerequisites: ENG*H102 or ENG*H200. Students read and discuss representative writers of British poetry and prose to the eighteenth century. Assigned readings may include Chaucer, Shakespeare, Milton, Pope, Swift, and Johnson.

ENG*H232 British Literature II 3 credits
Prerequisites: ENG*H102 or ENG*H200. Students make an intensive critical and historical study of British writers beginning with Blake and the Romantics and ending with twentieth century writers.

ENG*H241 World Literature I 3 credits
Prerequisite: ENG*H102 or ENG*H200. This course is a study of representative works of world literature to 1715. The course emphasizes the study and consideration of the literary, cultural, and human significance of selected great works of the Western and non-Western literary traditions.

ENG*H251 African-American Literature 3 credits
Prerequisite: ENG*H102 or ENG*H200. This survey of African-American literature will examine the Black experience through literature. It will begin with the eighteenth century and continue to the present.

ENG*H252 African-American Drama 3 credits
Prerequisite: ENG*H102 or ENG*H200. This course is a survey of African-American drama examining African-American theatrical experiences through the study of dramatic presentation.

ENG*H260 Studies in Women's Literature 3 credits
Prerequisite: ENG*H102 or ENG*H200. This course is a study of the representative works by women from historical, social, and literary perspectives and examines the literary impact of gendered identities. Emphasis is given to how gender roles develop and change and how women's views of themselves are reflected in their writing. From tracing the development of this literature, the class will consider the historical, philosophical, religious, and cultural perspectives that allow us to delve into the writing of major women writers. This course will focus primarily on Western writers, though not exclusively. Assigned readings may include writers from the Renaissance to the present.

ENG*H269 Studies in Young Adult Literature 3 credits
Prerequisite: ENG*H102 or ENG*H200. This course covers selection, evaluation, and critical study of fiction available for adolescents and young adults (ages 12-18). Students will learn about the young adult novel as a literary form with an emphasis on reading of representative fiction. The course will also include the history of the genre and interpretive approaches to texts, the exploration of common themes, as well as the opportunity to write young adult fiction.

ENG*H274 The Graphic Novel as Literature 3 credits
Prerequisite: ENG*H102 or ENG*H200. This course explores the use of the combination of words and graphic images to create effective storytelling. Both contemporary and historic examples of graphic novels will be examined.

ENG*H277 Science Fiction & Society 3 credits
Prerequisite: ENG*H102 or ENG*H200. In this course, students will develop skills in understanding and appreciating the genre of science fiction and its relation to other literary genres. Additionally, students will apply critical methodologies and investigate relationships between science fiction and society, thus confirming their skills of analysis and writing. Particular approaches to science fiction will involve Marxist, feminist, gender, psychoanalytical, and anthropological critical theories.

ENG*H278 Contemporary Literature 3 credits
*Prerequisite: ENG*H102 or ENG*H200.* This course examines post-WWII literature, including short fiction, poetry, and drama. This course will include discussions of literatures from around the world as well as new developments in literary studies, such as post-Colonialism and postmodernism.

ENG*H281 Creative Writing 3 credits
*Prerequisite: ENG*H101.* This course gives students practical experience in writing various forms of prose and verse. The emphasis will be on individual creative methods, creative reading and listening, editorial techniques, and the production of finished work, including possible preparation of manuscripts for publication.

ENGLISH AS A SECOND LANGUAGE **Liberal Arts and Behavioral/Social Sciences Division**

ESL students registered prior to Fall 2015 may use up to 6 credits of intermediate and advanced levels of ESL courses to fulfill the modern language and/or arts and humanities elective requirements. For new students registered in Fall 2015 or onwards, ESL 169, ESL 162 and ESL 157 only can be used to fulfill the General Education Requirements for Written Communication and Oral Communication respectively. However, transfer of ESL credits from NVCC to other institutions or from other institutions to NVCC are governed by the policies of the receiving institution.

The ESL courses are designed for students whose native language is not English. The sequence endeavors to help students attain a level of proficiency in English that will permit them to succeed in the academic or career programs of the college. The ESL sequence has six levels. The core of the sequence is the 6-credit reading/writing courses which integrate discussion and grammar into the content. There are grammar courses from levels one through five; oral communication courses at levels one, three and five; and one pronunciation course at level three. Placement in ESL courses is determined by the ESL office and is based on the Levels of English Proficiency (LOEP) exam and a writing sample. To be promoted to the next level, students must demonstrate mastery of the respective language learning competencies, which is determined by a grade of "C" or better and completion of all coursework. Students in upper levels of ESL may concurrently take some academic courses, in accordance with course prerequisites.

Students in ESL*H152 Reading and Writing V have the option to go to either ESL*H162 Reading and Writing VI, especially designed for those who received a "C" or "C+" in ESL*H152. Successful completion of this course with a "C" or better will promote students to ENG 101. For those ESL*H152 students who received a B- or higher or for those who received high placement scores, they can take an accelerated class, ESL*H169 Writing VI that is taken concurrently with an ENG*H101 ALP, which combined are known as Composition ESL ALP. After successful completion of the ESL ALP sequence, with a "C" or better, students progress to ENG*H102 or a higher ENG course.

ESL*H013 Writing and Reading I 3 credits
*Prerequisite: Successful completion of ESL*H5030 (Real Life English) or specified score on ESL placement exam.* In this low beginning level course, students begin to develop basic skills in reading and writing. Coursework focuses on basic grammar structures and sentence construction. Vocabulary is increased through reading and writing. This course requires a minimum of six hours of outside work per week.

ESL*H015 Grammar I 3 credits
*Prerequisite: Successful completion of ESL*H5030 Real Life English or specified score on ESL placement exam.* In this low beginning level course, students will be introduced to patterns and rules of basic grammar structures. Students will practice and apply these structures through exercises, reading, writing, and discussion. This course requires a minimum of six hours of outside work per week.

ESL*H017 Oral Communications I 3 credits
*Prerequisite: Successful completion of ESL*H5030 Real Life English or specified score on ESL placement exam.* In this low beginning level course, students will work toward improving their speaking and listening skills. Students will develop their oral communication skills, including pronunciation, through a variety of activities such as role playing, conversation, large and small group discussions, and oral reports. This course requires a minimum of six hours of outside work per week.

ESL*H022 Reading and Writing II 6 credits
*Prerequisites: "C" or better in ESL*H013 or specified score on ESL placement exam.* In this high beginning level course, students continue to develop reading and writing skills by reading extensively and writing effective sentences and structured paragraphs. Reading and writing also provide the basis for vocabulary and grammar development. This course requires a minimum of twelve hours of outside work per week.

ESL*H025 Grammar II 3 credits
*Prerequisite: "C" or better in ESL*H013, or specified score on ESL placement exam.* In this high beginning level course, students build on basic grammar structures and practice them with reading, writing, and speaking exercises. This course requires a minimum of six hours of outside work per week.

ESL*H132 Reading and Writing III 6 credits
*Prerequisite: "C" or better in ESL*H022 or specified score on ESL placement exam.* In this low intermediate course, students continue to develop reading and writing skills by reading extensively and writing effective sentences and structured paragraphs. Assigned readings (including whole works) inspire individual writing assignments as well as discussions in small and large groups. In addition to learning grammatical principles, students work on effective sentence structures, paragraph development and organizational skills in writing compositions. This course requires a minimum of twelve hours of outside work per week.

ESL*H135 Grammar III 3 credits
*Prerequisite: "C" or better in ESL*H022 or specified score on ESL placement exam.* In this low intermediate course, patterns and rules of grammar structures will be introduced, practiced, and applied in a meaningful context. Formal exercises, short writings, and communicative activities will be used to promote mastery of essential language structures. This course requires a minimum of six hours of outside work per week.

ESL*H137 Oral Communications III 3 credits
*Prerequisite: "C" or better in ESL*H022 or specified score on ESL placement exam.* In this low intermediate course, communication skills and fluency will be developed using authentic language. Students will develop increased self-confidence and competency through a variety of activities that address oral communication, pronunciation, listening and reading comprehension, and vocabulary development. Activities will include role-playing, interviewing, class and small group discussions, oral reports, and written exercises. This course requires a minimum of six hours of outside work per week. (Fall, Spring)

ESL*H139 Pronunciation III 3 credits
*Prerequisites: "C" or better in ESL*H022 or specified score on ESL placement exam.* This course will provide extensive, in-depth practice in English pronunciation with special focus on rhythm, stress, and intonation. Basic features of English phonology will be reviewed. Students will learn to evaluate their own speech in order to become more competent, self-assured speakers. Short readings and poetry will be used to facilitate the unique expressive and communicative features of spoken English. This course requires a minimum of six hours of outside work per week.

ESL*H142 Reading and Writing IV 6 credits
*Prerequisite: "C" or better in ESL*H132 or specified score on ESL placement exam.* In this high intermediate course, students continue to strengthen reading and writing skills. Assigned readings (including whole works) as well as student writing form the basis for small group and class discussions. Students focus on writing and rewriting essays to develop ideas, organization, clarity and accuracy in their writing. This course requires a minimum of twelve hours of outside work per week.

ESL*H145 Grammar IV 3 credits
*Prerequisite: "C" or better in ESL*H132 or specified score on ESL placement exam.* In this high intermediate course, students will further develop proficiency in the use of grammar structures through group discussions, oral practice, written exercises, and short writings. Use of grammar structures in authentic contexts will be emphasized. This course requires a minimum of six hours of outside work per week.

ESL*H152 Reading and Writing V 6 credits
*Prerequisite: "C" or better in ESL*H142 or specified score on ESL placement exam.* In this low advanced course, students continue to refine reading comprehension and writing proficiency. Assigned readings (including whole works) as well as student writing provide the text for small group and class discussions. Through writing and rewriting essays, students work on organizational skills, development of ideas, clarity and the mechanics of effective writing. This course requires a minimum of twelve hours of outside work per week.

ESL*H155 Grammar V 3 credits
*Prerequisite: "C" or better in ESL*H142 or specified score on ESL placement exam.* In this low advanced course, key grammar structures will be learned and practiced through group discussions, oral and written exercises, and short writings. Use of grammar structures in authentic contexts will be emphasized. This course requires a minimum of six hours of outside work per week.

ESL*H157 Oral Communications V 3 credits
*Prerequisite: "C" or better in ESL*H142 or specified score on ESL placement exam.* In this low advanced course, fluency in oral communication and listening skills will be further developed. Communicative competency will be addressed in an authentic and meaningful setting. Taped lectures and conversations, oral presentations, interviewing, class and small group discussions, role playing and vocabulary development activities will enhance proficiency in English. This course requires a minimum of six hours of outside work per week.

ESL*H162 Reading and Writing VI 3 credits
*Prerequisite: "C" or better in ESL*H152/5152 or specified score on ESL placement exam.* In this high advanced course, students continue to develop fluency, clarity, organizational skills and the mechanics of effective writing with a focus on the linguistic and rhetorical requirements of second language learners. Course content and writing assignments are based on reading selections, complete works, and student texts. Students write, revise, and edit drafts participate in group work, and confer with teachers and peers. Successful completion of this course with a "C" or better will promote students to ENG 101. This course requires a minimum of twelve hours of outside work per week.

ESL*H169 Writing VI 3 credits
*Prerequisite: "B-" or better in ESL*H152 or specified score on ESL placement exam. Co-requisite: ENG 101 Composition ESL ALP.* This course is designed for the advanced ESL student who would like to complete their ESL course sequence faster with the benefit of concurrently taking ENG 101 ALP course. This course is designed to refine students' writing through intensive editing and revision practices focusing on using Academic Word List vocabulary and accurate grammar structure usage. Paraphrasing and summarizing academic texts are integral. In addition, students will read, critically assess and write responses to readings. This course requires a minimum of 6 hours of outside work per week.

ENVIRONMENTAL SCIENCE **Science, Technology, Engineering & Mathematics** **Division**

ENV*H110 Environmental Regulations 3 credits
 A broad view of federal, state and municipal environmental regulations as they apply to industry, commercial establishments, local governmental facilities and the individual citizen. Provides a practical approach to regulatory understanding to enable one to plan an effective and economically sound management system. Course topics include the Clean Air Act (CAA), Clean Water Act (CWA), Toxic Substance Control Act (TSCA), SARA Title III (Community Right-to-Know), Resource Conservation and Recovery Act (RCRA) CT Transfer of Establishment Act (TASA) and federal, state and local regulations covering such topics as hazardous material transportation, in-ground tank storage and specific hazardous materials such as asbestos and PCBs. ISO 14,000 requirements will be discussed.

ENV*H120 Introduction to Hazardous Materials 3 credits
 Hazardous materials are associated with virtually all industrial activities. This course is designed for people who routinely come in contact with hazardous materials in the workplace. OSHA regulations, Material Safety Data Sheets (MSDS), toxicology, selection of protection equipment, ventilation and storage of hazardous materials will be covered. Fire, electrical, radiation and noise hazards will also be discussed. Students will use industrial supply catalogs, computers and the Internet to identify appropriate protective equipment for a range of hazardous materials.

ENV*H205 Foundations of Environmental Chemistry 3 credits
*Prerequisite: CHE*H111 or 121.* The objective of the course is to study the chemical reactions in natural systems. The fate and transport of contaminants introduced into the environment by humans will be examined. Ways of analyzing for contaminants in the atmosphere, hydrosphere, and lithosphere will be identified and students will obtain practical experience with some of these techniques. Written lab reports will be required. Two class and two laboratory hours weekly.

ENV*H240 Principles of Soil and Water Resources 3 credits
 The study of soil structure and various methods to reduce soil erosion. Discussion of soil chemical structure and its relationship to nutrient availability. Depletion of soil nutrients by leaching and excessive crop harvesting, and soil restoration will also be considered. The hydrologic cycle will be studied in detail, including surface water body and ground water characteristics. Soil chemical cycles for major plant nutrients and contaminants will also be investigated. A research paper is required. Three hours weekly.

FINANCE
 Refer to the Business Finance section.

FIRE TECHNOLOGY AND ADMINISTRATION **Business Division**

FTA*H112 Introduction to Fire Technology 3 credits
 This course provides an overview to fire protection and emergency services; career opportunities in fire protection and related fields; culture and history of emergency services; fire loss analysis; organization and function of public and private fire protection services; fire departments as part of local government; laws and regulations affecting the fire service; fire service nomenclature; specific fire protection functions; basic fire chemistry and physics; introduction to fire protection systems; introduction to fire strategy and tactics; life safety initiatives.

FTA*H116 Building Construction 3 credits
*Corequisite: FTA*H112.* This course provides the components of building construction related to firefighter and life safety. The elements of construction and design of structures are shown to be key factors when inspecting buildings, preplanning fire operations, and operating at emergencies.

FTA*H118 Fire Prevention and Inspection 3 credits
*Corequisite: FTA*H112.* This course provides fundamental knowledge relating to the field of fire prevention. Topics include: history and philosophy of fire prevention; organization and operation of a fire prevention bureau; use and application of codes and standards; plans review; fire inspections; fire and life safety education; and fire investigation.

FTA*H122 Fire Behavior and Combustion 3 credits
 This course explores the theories and fundamentals of how and why fires start, spread, and are controlled.

FTA*H126 Safety and Survival 3 credits
 This course introduces the basic principles and history related to the national firefighter life safety initiatives, focusing on the need for cultural and behavior change throughout the emergency services.

FTA*H130 Fire Technology and Administration Tech-Prep Internship 3 credits
 This course is a directed study and service opportunity for those in a Tech-Prep program. It is designed to allow the participant to develop an awareness of the fire service and provide a service opportunity benefiting both the student and the community. To participate, a student, at a minimum, must be part of a Junior/Cadet/Apprenticeship/Probationary program sponsored by a fire, rescue, emergency medical service or fire marshal's office. To obtain college credit for this program, the student must participate in the Tech-Prep program as prescribed for his/her high school. Credit for this course will not be granted separately. The student will be assigned a mentor from his/her sponsor and the Fire Technology and Administration program of Naugatuck Valley Community College. The student will be required to complete a project designed by the Department and agreeable to the mentor from Naugatuck Valley Community College. In addition, the student will be required to complete at least two assignments one of which will be in support of the major project. Prior to the start of the program the student will be assisted in developing his/her program and what specifically will be required to obtain credit.

FTA*H210 Water Supply and Hydraulics 3 credits
*Corequisite: MAT*H167 or MAT*H172.* This course provides a foundation of theoretical knowledge in order to understand the principles of the use of water in fire protection and to apply hydraulic principles to analyze and to solve water supply problems..

FTA*H213 Codes and Standards 3 credits
 This course studies fire and building codes as a means for providing reasonable public safety; the code development and adoption process; code administration; major code producing organizations; national standards with particular concentration on the Life Safety Code of the NFPA and its referenced standards. Three class hours weekly.

FTA*H216 Municipal Fire Administration 3 credits
*Prerequisite: FTA*H112.* This course introduces the student to the organization and management of a fire and emergency services department and the relationship of government agencies to the fire service. Emphasis is placed on fire and emergency service, ethics, and leadership from the perspective of the company officer.

FTA*H218 Fire Protection Systems 3 credits
*Prerequisite: FTA*H112.* This course provides information relating to the features of design and operation of fire alarm systems, water-based fire suppression systems, special hazard fire suppression systems, water supply for fire protection and portable fire extinguishers.

FTA*H219 Fire Investigation 3 credits
*Prerequisite: FTA*H116. Corequisite: CHE*H111 or Instructor Approval.* This course is intended to provide the student with the fundamentals and technical knowledge needed for proper fire scene interpretations, including recognizing and conducting origin and cause, preservation of evidence and documentation, scene security, motives of the fire setter, and types of fire causes.

FTA*H272 Terrorism - First Responders 3 credits
 Many of the principles that apply to Haz Mat, EMS, and crime scene responses also apply at WMD responses. This course will provide additional information to help the First Responder understand informed, controlled, and safe responses to incidents involving weapons of mass destruction. 3 contact hours.

GEOGRAPHY

Liberal Arts and Behavioral/Social Sciences Division

GEO*H102 Introduction to Human Geography 3credits
 This course is a study of interrelationships between the physical Environment and human activity with special emphasis on geographic factors which underlie current political, social, and economic problems.

GEO*H111 World Regional Geography 3 credits
 The interaction of the physical Environment with the social, cultural, political, and economic conditions in various regions of the world, and the diverse patterns of human activity which emerge from the interplay of these forces are examined. The course is organized on natural regions such as Anglo-America, Latin America, Europe, the Middle East, Africa, and the Pacific World.

GEOLOGY

Science, Technology, Engineering & Mathematics Division

GLG*H121 Introduction to Physical Geology 4 credits
 This course will be devoted to the study of the processes involved in the formation of the earth's crust. A study of earthquakes, volcanoes, mountain building, minerals, oceans, continental drift, and erosion by wind, water, and ice will be explored. Three hours lecture and three hours laboratory weekly. Some field trips may be included.

GERMAN

Refer to Languages.

GRAPHIC DESIGN

Refer to Art.

HEALTH

HLT*H103 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.

HISTORY**Liberal Arts and Behavioral/Social Sciences Division****HIS*H101 Western Civilization I 3 credits**

*Prerequisite: Eligibility for ENG*H101.* Students may not receive credit for HIS*H104 or 121 in addition to HIS*H101. This course is an issue-oriented course of Western Civilization from the Ancient World to 1715 from a contemporary perspective. Topics selected on the basis of significance and relevance will include oriental despotism, the origins of political democracy, concepts and codes of justice, the first federal empire, feudalism and the emergence of secular nation – states, and the Renaissance and Reformation – as seen through the eyes of statesmen, philosophers, religious leaders, writers, artists, scientists, etc. of their day.

HIS*H102 Western Civilization II 3 credits

*Prerequisite: Eligibility for ENG*H101.* Students may not receive credit for His*H104 or 122 in addition to His*H102. This course is an issue-oriented study of Western Civilization from 1715 to the present from a contemporary perspective. Topics, selected on the basis of significance and relevance, will include change through revolution and evolution, industrialization and class conflict, individualism and collectivism, nationalism and imperialism, war and peace, totalitarianism, and the ecumenical spirit – as seen through the eyes of statesmen, philosophers, religious leaders, writers, artists, scientists, etc. of their day.

HIS*H104 Milestones in Western Civilization 3 credits

*Students may not receive credit for HIS*H101, 102, 105, or HIS*H122 in addition to HIS*H104.* A one-semester course in Western Civilization. The course is issue-oriented and focuses on such topics as order and justice under law, the distribution of wealth and power, class structures and social mobility, church and state, the impact of inventions and technology, industrialization and urbanization, nationalism and imperialism, reform and/or revolution, the state and the individual, and war and peace.

HIS*H121 World Civilization I 3 credits

*Students may not receive credit for HIS*H101 or 104 in addition to HIS*H121.* A study and appreciation of African, European, and American civilizations, and their interaction with each other up to 1600.

HIS*H122 World Civilization II 3 credits

*Students may not receive credit for HIS*H102 or 104 in addition to HIS*H122.* A study and appreciation of African, European, and American civilizations, and the increasing interdependence from 1600 to the present.

HIS*H123 Contemporary Issues in World Civilization 3 credits

In-depth studies of some of the major problems that confront the world today are presented. Course content is likely to vary from one semester to another in order to keep up with the changing complexion of the world's problems.

HIS*H124 Women of the World 3 credits

This course is a study of women as driving forces in history and women driven by historical forces. Portraits of outstanding historical and contemporary female personalities – pagan priestesses and goddesses, women poets, scientists, educators, healers and reformers are presented.

HIS*H201 U.S. History I 3 credits

*Prerequisite: Eligibility for ENG*H101.* This course is essentially a chronological treatment of the social, economic, political and cultural development of the American people to 1865. Certain topics such as colonial life, the Revolution, the political thought of Hamilton and Jefferson, reform, slavery, abolition, and the Civil War are studied in depth.

HIS*H202 U.S. History II 3 credits

*Prerequisite: Eligibility for ENG*H101.* The course is essentially chronological in its treatment of the period from 1865 to the present. Certain topics in the social, economic, political, and cultural development of the American nation, such as the Age of Industrialization, International Relations and World War I, the Depression and New Deal, World War II and postwar period including the Cold War, the Eisenhower Era, the Sixties and Vietnam are studied in depth.

HIS*H210 History of Colonial America 3 credits

This course addresses the social, economic, political, and cultural development of the people of the British North American Colonies to 1783. Topics covered in this course will include the Americas prior to European colonization, early European exploration and settlement in the Americas, relations between Great Britain and the American colonies, the background and causes for the American Revolution, the development and operation of the American national government, and development of an American society/culture.

HIS*H213 The United States Since World War II 3 credits

This course addresses the social, economic, political and cultural development of the United States between 1920 and the present. Topics covered in this course will include the culture and economy of the 1920s, the Great Depression and the New Deal, World War II, the Cold War, the Korean War, American society in the 1950s, the Civil Rights Movement, the Women's Rights Movement, the war in Vietnam, the Counterculture of the 1960s and '70s, the Reagan and Bush eras, the end of the Cold War, and the Clinton era.

HIS*H215 History of Women in the US 3 credits

This course will examine the position of women in the United States from the late nineteenth century to the present. Topics of study will include the origins and issues of the women's movement in the nineteenth century, women's suffrage, the women's movement in the 1960's and 1970's, women and the law, women and patterns of work, women and business, women and religion, women and athletics, women and homemaking, women and assertiveness, women and sexuality, women and aging, women and divorce, and women and affirmative action.

HIS*H218 African-American History 3 credits

This course will utilize historical, sociological, and cultural perspectives in the analysis of the current status of African-Americans in the United States. The quest for equality, problems and prospects, and the role of African-Americans in the development of American and world cultures will be explored.

HONORS**Academic Affairs****HON-H200 Honors Special Topics Seminar 3 credits**

*Prerequisite: Member of Honors Institute. "B" or better in ENG*H101 and MAT*H137.* In this course Honors students will examine a current, "real world" topic from an interdisciplinary perspective. Each student will produce a final research, design, or artistic product that demonstrates independent exploration of the topic. Required for honors designation. Topic varies each semester.

HORTICULTURE**Science, Technology, Engineering & Mathematics Division****HRT*H101 Landscape Construction 4 credits**

This course provides applied experiences in assorted construction techniques necessary in the development of landscapes. Included are a survey of construction materials, deck design and construction, patio and walkway installation, stone wall construction, fencing, retaining wall design and construction. Earthwork calculations, measuring and materials estimating are included. Actual field exercises will be provided.

HRT*H102 Woody Plants 3 credits
This is a basic introduction to common desirable, deciduous and evergreen trees, shrubs and vines for the natural and cultivated landscape. The course emphasizes identification as well as learning the attributes, growth habits and cultural needs of the plants. Nomenclature and fundamental tree biology are discussed.

HRT*H103 Herbaceous Plants 3 credits
This course provides instruction in the identification and selection of annual and perennial herbaceous plants for various habitats. Students will develop an understanding of the plants' ornamental value in garden and landscape design, based on flowers, foliage, form and adaptability to the environment.

HRT*H105 Fruit and Vegetable Production 3 credits
Primarily a course for residential vegetable and fruit cultivation, the course provides basic knowledge and methods that can be applied on the commercial level as well. Included are topics on site selection and soil preparation, planting, pruning, fertilization and general cultivation of vegetables, small bush and large tree fruits.

HRT*H115 Turf Management 3 credits
The establishment and maintenance of turf grass are studied in the course. Lawn, golf course, and athletic field care are emphasized. Students will also learn to identify the turf grasses, identify and control weeds, insects, pests and diseases.

HRT*H124 Floral Design I 3 credits
The basic principles of design as applied to the art of floral arranging are examined and flower shop management operation.

HRT*H202 Landscape Design I 3 credits
*Pre-requisite: HRT*H102.* This course provides students with the basic knowledge and skills to create a successful landscape plan. Starting with the proper placement and design of driveways and walkways, it guides the student through the stages of developing an entire residential property. Appropriate plant selection is based on site characteristics and design principles and elements.

HRT*H203 Landscape Design II 3 credits
*Prerequisite: HRT*H202 or permission of instructor.* This course is designed as a continuation of HRT*H202. This course will aid students in developing skills in perceptual design, job bidding, as well as give an introduction to computer aided drafting, as related to horticulture landscaping.

HRT*H204 Computers in Landscape Design 3 credits
This course is an introduction to utilizing computer applications in the landscape design profession. Material will cover the development of two-dimensional base plans, three-dimensional models, and two dimensional renderings. Also, examples of real-life projects will be highlighted to illustrate the transition from computer drawings to construction. The student will develop a working knowledge of AutoCad, ProLandscape, Google Sketchup, and Adobe Photoshop.

HRT*H206 Landscaping Small Properties 3 credits
This course complements and enhances HRT*H202, Landscape Design. It covers the evolution of garden design, an analysis of color relationships in design, and how to plan different kinds of gardens.

HRT*H207 Landscape Maintenance 3 credits
This course is designed to assist the professional and amateur landscape gardener to maintain their gardens through an understanding of plant growth, pruning, nutrition, propagation, etc. The course also includes landscape estimating.

HRT*H215 Pest Control in Ornamentals and Turf 3 credits
This course teaches students how to control pests in trees, shrubs, gardens and greenhouses. Detailed studies of the life histories of the pests are a background to learning some of the techniques of integrated pest management. However, the responsible and safe use of pesticides is emphasized throughout the course. This is a useful preparation for the certification of commercial pesticide applicators and arborists.

HRT*H219 Arboriculture 3 credits
This course is designed to prepare landscapers for the State Arborist Exam. Topics include the biology, identification, selection, planting, management, preservation of trees and diagnosis of tree problems. It is recommended that if students lack extensive work experience they should have taken HRT*H102 (Woody Plants) and HRT*H215 (Pest Control) before taking the State Arborist Exam.

HRT*H222 Greenhouse Operations & Management 4 credits
This course focuses on the selection, production and management of greenhouse and bedding plants, interior plantscape management and design, management of annuals and perennials. Plant physiology is related to the Environmental effects on plant growth.

HRT*H223 Greenhouse Management II 4 credits
*Prerequisite: HRT*H222 or permission of instructor.* This course is a continued in-depth study of the commercial greenhouse industry. It is a complement to HRT*H222. Included in the course is an in-depth look at the production of greenhouse crops, disease, and insect control. Interior plant maintenance, soils testing, and development of production programs with the use of computer aided programs will be used to better understand plant growth.

HRT*H224 Plant Propagation & Hybridization 4 credits
This course is an in-depth study of the world of plant reproduction and genetics. This course is a complement to other courses offered in the Horticulture degree and certificate program. This course will give students the theoretical and practical skills needed to reproduce plants asexually, and through micropropagation. Included will be the use of the college propagation facilities to facilitate learning.

HRT*H240 Nursery Management 3 credits
*Pre-requisites: HRT*H102 Woody Plants and HRT*H103 Herbaceous Plants or permission of program coordinator.* This course provides a basic understanding of how to start and manage a commercial plant nursery. Site and crop selection, irrigation and nutrition management will be addressed. Students will study the principles and practices of nursery crop production as well as fundamental business organization and marketing. Course activities include field trips to nursery sites.

HRT*H290 CWE/Horticulture Co-Op 3 credits
Prerequisite 12 credits in Horticulture, "C" or better, and permission of Horticulture Coordinator, or Division Director. This course involves a work experience, special project, independent study or course substitution which will vary according to the student's needs and interests. A written report and weekly journal will be required and evaluated at the end of the course. Conferences among students, work study supervisory agency, and faculty facilitator will be held during the semester. A two hour orientation/planning workshop at the beginning of the Co-Op is required.

**HOSPITALITY MANAGEMENT:
FOODSERVICE MANAGEMENT
HOTEL MANAGEMENT
Business Division**

HSP*H100 Introduction to the Hospitality Industry 3 credits
An orientation to the business of hospitality and its various systems including restaurants, hotels, and institutions. The course surveys the hospitality industry's history, current business and career trends, operations management and organization, and forces shaping the future of the industry and its place in the economy.

HSP*H101 Principles of Food Preparation 3 credits
A laboratory course which teaches the theory and develops skills in basic cooking methods and culinary techniques in the production of soups, salads, vegetables, stocks, and sauces. Meats, poultry, and seafood are prepared employing standard techniques with special attention to commercial and quality production. Tool and equipment use, weights, measures, and recipe conversion are discussed and practiced.

HSP*H102 Food Production and Purchasing 3 credits
Prerequisite: HSP*-H101. A continuation and application of the culinary techniques and knowledge acquired in HSP*H101 through the planning and preparation and group service of advanced menus. Discussion of meat, poultry, and fish identification, fabrication, and purchasing specifications, as well as food costing and menu pricing.

HSP*H103 Principles of Baking I 3 credits
 This course takes an expansive view of baking and pastry. Students will learn the basic principles of baking through lecture, demonstrations, assignments, and hands-on participation. Technique will be emphasized. Kitchen math, weights and measurements, quality and cost control, and sanitation will be incorporated into each lesson. Students will explore basic baking ingredients and their important characteristics in relation to baked goods. Recipes, both sweet and savory, will include various doughs and their accompanying fillings; pies and tarts; cakes, icings, and fillings; cookies and petit fours; pâte à choux; creams, custards, and mousse; and chocolate desserts.

HSP*H108 Sanitation and Safety 3 credits
 An in-depth coverage of commercial foodservice sanitation **resulting in SERVSAFE® Qualified Food Operator certification as required by Connecticut law.** Included are proper food handling procedures in receiving, storage, preparation, purchasing and service, as well as staff training and quality control SERVSAFE® Alcohol Certification also provided.

HSP*H109 Food Safety Certification (8 weeks) 1 credit
*Not open for credit for students who have successfully completed HSP*H108.* Designed for the non-degree students employed in the foodservice industry. Aspects of applied commercial foodservice sanitation resulting in nationally recognized SERVSAFE® Qualified Food Operator certification as required by Connecticut law. Prevention of food-borne illness, sanitary procedures in the protection and service of food to the public, laws and regulations, sanitary design and employee training will be discussed. Eight weeks.

HSP*H125 Wine and Viticulture I 3 credits
 Botanical study of the grape (vitis) and principles of enology (wine making) are studied and practiced. Students also explore viticultural (grape growing) techniques used throughout the world. Wine tasting sessions included. *Per Connecticut State Law, persons under the age of 21 are not allowed to consume alcoholic beverages.*

HSP*H126 Wine and Viticulture II 3 credits
 An in-depth coverage of the science and art of growing grapes, including all aspects of the physical vine life cycle and cultural considerations throughout human history. Other topics include biology, anatomy, climatic influences, and varietal and hybrid growing characteristics. Further instruction and practice in winemaking is offered. *Per Connecticut State Law, persons under the age of 21 are not allowed to consume alcoholic beverages.*

HSP*H135 Service Management 3 credits
 An exploration of “front of the house” hospitality operations, including styles and standards of dining room, lounge, and concierge services as well as dining room organization, customer relations, merchandising and sales promotion. Special emphasis is placed on manager/supervisor functions such as training, motivation, cashiering, revenue control and wine stewardship. Students will serve guests as the schedule dictates. Schedule adjustments may be requested to accommodate guest service.

HSP*H202 Catering and Event Management 3 credits
Prerequisites: HSP*H101, 102. A lecture/laboratory practicum emphasizing the management and planning of catering, banquet and conference service with in-depth discussion of the meetings market and technology. Advanced culinary preparations will be practiced, stressing group service.

HSP*H211 Food and Beverage Cost Control 3 credits
Prerequisites: CSC*H101 or CSA*H105, HSP*H100, HSP*H101, MAT*H095 or equivalent, or consent of Program Coordinator. An in-depth study of the control function of the hospitality manager and its various applications in the purchasing, receiving, storing, issuing, production and sale of food and beverage. Operational planning and analysis, labor and labor cost control, and cost/volume/profit relationships are explored. This course may result in nationally recognized certification upon successful performance on certification examination.

HSP*H215 Principles of Baking II 3 credits
 This course expands on the basic techniques and principles of Baking I, though it is not a prerequisite. Students will learn the more advanced baking procedures and their applications through lecture, demonstrations, assignments, and hands-on execution of recipes. Participation and proper technique and method are emphasized. Kitchen math, particularly baker’s percentages, weights and measurements, quality control, and sanitation will be incorporated into each lesson. Baking as science will also be explored including the chemistry of the ingredients, techniques, and methods and their interactions. Students will learn to understand the structure of recipes. Recipes, will included classic and modern preparations of advanced pastries such as petit fours, choux paste, laminated doughs, and chocolate work. Sugar techniques will be included. Students will learn finishing and plating and dessert artistry.

HSP*H216 Artisan Bread 3 credits
 This course will serve as an introduction to hand crafted bread, using ferment & fresh yeast methods, with emphasis on understanding the chemical reactions among ingredients. Creativity and presentation of finished product will be highlighted. Students will be taught through lecture, demonstrations, assignments and active participation. Kitchen math, weights and measurements will be discussed throughout the course.

HSP*H237 Hospitality Marketing 3 credits
Prerequisites: HSP*H100. An analysis of the services market with regard to hotel and restaurant marketing and methods of advertising, promotion, public relations, pricing, and discussion of strategic planning and positioning.

HSP*H241 Principles of Travel and Tourism 3 credits
 A survey of today’s travel industry and its primary segments, including recreation and leisure systems, the transportation and accommodation industries, destination development and characteristics of the travel market. The role and function of the travel agency and career opportunities will be explored.

HSP*H242 Hotel Management 3 credits
 A study of hotel and motel front office systems and procedures, including organization, business flow, reservations and rooming, guest accounting, and security. Management functions and operating statistics are discussed and practiced.

HUMAN SERVICES **Liberal Arts and Behavioral/Social Sciences Division**

HSE*H101 Introduction to Human Services 3 credits
 This course offers an introduction to the Human Services field, including the history of the various service professions, an overview of the primary populations that receive services, information about a variety of mental health and social service agencies, and a discussion of successful treatment methods. This is the foundation course of the three core program courses. (fall/spring)

HSE*H115 Child Advocacy in Human Services 3 credits

The course presents concepts, policies, and practice in the broad field of child and family services and advocacy. Among the topics to be examined are the needs of children and families, the major policies and programs of social services designed for children and families, and the policy issues that emerge for planning for children and families. The intent of the course is to provide the student with a substantive base of knowledge about policies and practice in family and child services. Students will be helped to develop an overall orientation to family - as a unit of attention, as well as to the emerging service concerns of family support, family preservation, the need for continuity of family relationships, and to the various culturally competent approaches. (spring)

HSE*H133 Disabilities and Mental Health 3 credits

This is a required course for all Human Services students wishing to pursue the Disabilities Specialist/Mental Health Option. This is an introductory course in disabilities and mental health. Its primary purpose is to familiarize students with both developmental and mental disabilities from childhood to adulthood. It examines the impact of physical and mental disabilities, major legislation, ethics, advocacy, medical and psychological concerns, rehabilitation, employment, social planning, and living and working in society for children and adults with disabilities and mental health issues. The physical and psychosocial aspects of developmental disability and mental health also are studied through a focus on education, family life, community, and values. (fall)

HSE*H170 Introduction to Gerontology 3 credits

The course examines the biological, social, and psychological aspects of aging and the problems that are experienced by the aged in America. It explores the local, state, and federal programs and services available to the elderly and the caregiver. Topics covered include Alzheimer's Disease, Medicare, Social Security, living wills, and Hospice vs. home care issues. (fall)

HSE*H171 Death and Dying (also listed as SOC*H225) 3 credits

An exploration of the stages of death and dying. Special emphasis will be placed on understanding grief and loss. The course will focus on the following: the dying person, sudden death and the effect on the family, cultural and economic issues, the broad moral aspects of death, and other related problems. (spring)

HSE*H202 Introduction to Counseling and Interviewing 3 credits

*Prerequisite: HSE*H101 with a grade of "C" or better.* This is a systematic study of the basic principles, methods, and current techniques employed in assessment, planning, interviewing, counseling, contracting, and interventions. The course develops student self-awareness of personal values and professional ethics. Students are expected to learn through theory, examination of their own values, and classroom application of interactional skills. (fall/spring)

HSE*H281 Human Services Field Work I 3 credits

*Prerequisites: HSE*H101, 202, with a grade of "C" or better. Successful completion of 6 credit hours in Behavioral Sciences, ENG*H101, or permission of the Human Services Coordinator or Division Director.* Work experience in a human service agency is a major component of this required course. The student will have the opportunity to apply the values, concepts, and skills acquired in the introductory and other HS courses. This activity will be conducted under the supervision of the faculty coordinator and the professionals in the agencies in which the students are placed. (fall/spring) The course consists of 1.160-hour Field Work Experience 2.Weekly Field Work Seminar that links field practice to issues related to working within a wide variety of community agencies. (fall, spring)

HUMANITIES**Liberal Arts and Behavioral/Social Sciences Division****HUM*H130 Philosophy and Practices of Yoga 3 credits**

This course investigates the philosophy of yoga, its origins, and its place in our contemporary lives. It teaches the different aspects of yoga and areas of study that encompass the foundational principles of the discipline. Students will learn the basic poses as well as meditation and breathing techniques.

INTERDISCIPLINARY STUDIES**IDS-H101 First Year Experience 1.5 credits**

The First Year Experience introduces students to diverse academic content, emphasizing the acquisition of learning strategies in preparation for rigorous college study. The content is designed to help students make a smooth transition to college. This course focuses on developing creative and critical thinking skills, developing information literacy and technology skills, improving written and oral communication, setting personal and academic goals, developing structured and consistent study habits, practicing effective time management, and becoming contributing members of the NVCC community. In addition, students will develop a comprehensive academic and career development plan leading to graduation. The course is required of all matriculating first-time, full-time students. There are no prerequisites.

ITALIAN

Refer to Languages.

LANDSCAPING

Refer to Horticulture.

LANGUAGES**Liberal Arts and Behavioral/Social Sciences Division****ITA*H101 Elementary Italian I 3 credits**

This course focuses on the basic acquisition of the four skill areas (speaking, listening, reading, writing) for survival communication. There is constant exposure to the cultural diversity of the Italian world using audio and video tapes. Knowledge of the language and culture is further enhanced by the technological component which requires students to use the Internet for various class activities. *Note: ITA*H101 is not open to students who have successfully completed three years of Italian courses in high school or who are native speakers except by consent of the Associate Dean of LABSS.*

ITA*H102 Elementary Italian II 3 credits

*Prerequisite: ITA*H101 or permission of the Associate Dean of LABSS.* ITA*H102 is a continuation of the skills taught in ITA*H101. Emphasis is placed on a more fluid style of communication at all skill levels.

ASL*H101 American Sign Language I 3 credits

This course covers the fundamentals of the basic structure of ASL grammar, introduces basic information about the deaf community and the deaf culture. Students will learn basic sign language and the finger-spelled alphabet. The course also presents information about the use of sign language by the deaf, as well as specialized uses with the deaf/blind, mentally retarded, autistic, and mentally ill.

ASL*H102 American Sign Language II 3 credits

*Prerequisite: ASL*H101.* Sign Language is a visual/manual language developed for communication by and with the deaf. This course continues the presentation of Sign Language as the best and most accepted method of communication with hearing-impaired people. Students learn more advanced sign language and uses of the finger-spelled alphabet. The course will present the uses of nuance, metaphor, connotative distinctions and syntactic structure.

SPA*H101 Elementary Spanish I 3 credits
 This course focuses on the basic acquisition of the four skill areas (speaking, listening, reading, writing) for survival communication. There is constant exposure to the cultural diversity of the Hispanic world using audio and video tapes. Knowledge of the language and culture is further enhanced by the technological component which requires students to use the Internet for various class activities. *Note: SPA*H101 is not open to students who have successfully completed three years of Spanish courses in high school or who are native speakers except by consent of the Associate Dean of LABSS.*

SPA*H102 Elementary Spanish II 3 credits
*Prerequisite: SPA*H101 or permission of the Associate Dean of LABSS.* SPA*H102 is a continuation of the skills taught in SPA*H101. Emphasis is placed on a more fluid style of communication at all skill levels.

SPA*H201 Intermediate Spanish I 3 credits
*Prerequisite: SPA*H102 or permission of the Associate Dean of LABSS.* This course is an intermediate Spanish course on the college level. Non-native and native speakers may enroll for credit in this course. The natural approach will be used in developing the four communication skills (listening, speaking, reading and writing). Students will study structure and grammar, read, converse, discuss and write in Spanish. A broad survey of Hispanic culture and custom will be presented.

SPA*H202 Intermediate Spanish II 3 credits
*Prerequisite: SPA*H201.* This course is a continuation of the skills taught in SPA*H201. The natural approach will be used. Grammar and structural studies will continue, but emphasis will be placed on reading, writing, speaking and listening with content based on civilization and cultural topics. Practice on oral tapes is required.

LATINO AMERICAN STUDIES Arts & Humanities Division

LAS*H201 Latino American Studies 3 credits
*Prerequisite: ENG*H102 or ENG*H200 with a grade of "C" or higher.* This course provides an introduction to the history, literature, ethnicity, culture and socio-economies of Latinos in the United States.

LEGAL ASSISTANT/PARALEGAL Business Division

LGL*H101 Introduction to Paralegalism 3 credits
 This course is an introduction to various aspects of the law, including but not limited to torts, contracts, criminal law and procedure and constitutional law. The course also surveys the structure and procedure of a number of court systems in the United States, and includes discussions of some topics of concern to the paralegal, including legal ethics, the rights of the elderly, the poor, the young and other disadvantaged minorities.

LGL*H102 Legal Research and Writing 3 credits
 Selected topics to develop skills in the use of legal encyclopedias, digests, reports, statutes, restatements, law reviews, and other research materials used by the legal profession are presented as an introduction to the uses of the law library. It is necessary that students do much of their legal research assignments in one of the many state or university law libraries located at various places throughout Connecticut. Students who are unable to devote several hours of research per week in one of the law libraries are advised not to enroll in LGL*H102.

LGL*H104 Real Estate Practice 3 credits
 This course is an introduction to the law of real property, and includes the preparation and recording of deeds, easements, leases and other public documents, in addition to a large variety of other documents, forms and procedures that a paralegal will encounter in real estate practice.

LGL*H204 Criminal Procedure 3 credits
 This course enables the student to utilize the classroom as a learning law laboratory since it will explore the Bill of Rights and the Fourteenth Amendment in detail as well as the entire United States Constitution. Constitutional law cases will be studied in the context of criminal procedure issues evolving from the precedents set by the United States Supreme Court.

LGL*H206 Bankruptcy Law 3 credits
 This course will provide students with a thorough review of the United States Bankruptcy Code. The course is tailored to explore the general functions of the Bankruptcy Court. The applicable rules and proceedings for various types of bankruptcy cases will be thoroughly discussed.

LGL*H208 Litigation 3 credits
 As an introduction to civil and criminal procedures, this course includes a survey of the functions of the federal and state court systems. The preparation of documents relative to the trial and appellate process is examined.

LGL*H209 Probate Practice and Estate Administration 3 credits
 This course is an introduction to the law of wills, trusts and estates, and includes the law of intestate succession as well as a survey of the probate system. This course will help to prepare the paralegal to become familiar with the various forms and documents associated with probate and estate practice.

LGL*H210 Family Law 3 credits
 This course will provide a strong background in the area of family law, with special emphasis on family law practice, including litigation. Other family law topics such as adoption, custody, community property, and child support are thoroughly investigated.

LGL*H230 Advanced Legal Issues Seminar 3 credits
 This course will be taught as a seminar and through a series of lectures. A guest speaker is also likely to participate. The problem-solving method will be used to examine critical issues in the wake of current legal events and new trends in the law.

MANAGEMENT

Refer to the Business section.

MANUFACTURING Science, Technology, Engineering & Mathematics Division

MFG*H104 Manufacturing Processes 4 credits
 Students study the theoretical concepts involved in the process of manufacturing parts as well as the development of the knowledge and skills required in the manufacturing process. Laboratory study emphasizes Milling, Drilling, Turning, Grinding & other manufacturing processes. Laboratories will involve setup and procedures for various manufacturing processes. Three class and two laboratory hours weekly.

MFG*H105 Manufacturing Math II 3 credits
*Prerequisite: Completion of Machine Technology Level I Certificate or with consent of instructor, MFG*H051: Manufacturing Math I (non-credit).* Second course in manufacturing mathematics. A further study of arithmetic and trigonometric operations applied to manufacturing circumstances. The following geometric entities are studied in detail: the circle, regular and irregular polygons, the right triangle and oblique triangles. The application of angular arithmetic including the study of: angle decimal conversion, the Pythagorean theorem, Sin, Cos, and Tan functions, and the Law of Sines and Law of Cosines.

MFG*H106 Computer-Aided Manufacturing I 3 credits
Prerequisites: MFG*H104. Basic CNC setup and operations with an introduction to automation programming, and tooling for CNC applications will be discussed. Basic functions using industry standard PLC controls will also be covered. Laboratory will include practice in setup and operation of CNC lathes and milling machines. Two class hours and two laboratory hours weekly.

MFG*H124 Blueprint Reading I 2 credits
 First course in blueprint reading. The study of orthographic projection. Topics include lines and their uses, auxiliary views, sectional views, basic and special dimensioning, dimensioning practices for holes, chamfers, angle, tapers, keyways diameters and radii. Also, geometric tolerancing and dimensioning is covered.

MFG*H125 Blueprint Reading II 3 credits
Prerequisite: Completion of Machine Technology Level I Certificate or with consent of instructor, MFG*H124: Blueprint Reading I. Second course in blueprint reading. A further study of simple and complex drawings for machining or assembly purposes. Topics include the application and meaning of geometric characteristics and controls, the metric system, weldment, forging and casting drawings and procedures, communication with freehand sketches, blueprint terms and abbreviations.

MFG*H151 Manufacturing Machining: Drill Press and Saw 1 credit
 Course on sawing and drilling machines. Topics covered include use of cutoff saws, use of drill presses, using the vertical band saw, drilling tools, countersinking, reaming and counter boring.

MFG*H152 Manufacturing Machining: Grinding 2 credits
 Course on the use of various grinding machines. Topics covered include selection and identification of grinding wheels, truing, dressing and balancing wheels, grinding fluids, using the horizontal spindle reciprocating table surface grinder, using the cylindrical grinder, and using the tool and cutter grinder.

MFG*H153 Manufacturing Machining: Bench Work 2 credits
 A basic course in the fundamentals, principles, practices and tools used in semi-precision and precision layout and in the various methods, and procedures for common machine shop bench work. Topics include measurement systems, layout principles, hand tools, and power tools.

MFG*H154 Manufacturing Machining: Lathe I 2 credits
 First course in the use of the lathe. Topics include identification of major components of the lathe, tool holders and tool holding, cutting tools, operating the controls, facing and center drilling.

MFG*H155: Manufacturing Machining - Milling I 2 credits
 First course on the vertical and horizontal milling machines. Topics to include cutting tools and holders, setups, spindles and arbors, work holding methods.

MFG*H156: Manufacturing Machinery - CNC I 2 credits
 First course in CNC machinery and programming. Topics include Cartesian coordinates, safe use of CNC equipment, setup and operate a two axis CNC lathe and a three axis CNC machining center, programming and runoff of parts.

MFG*H171 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, and 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.

MFG* H172 Introduction to Lean Supply Chain Management 3 credits
 This course is an introduction to the basic principles and methodologies of Supply Chain Management. The course reviews the lean 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.

MFG*H200 Manufacturing Management 3 credits
 This course introduces the student to the structure and organization of manufacturing management in an industrial society. The role of various management functions including strategic planning, industrial cost accounting, inventory management, and quality control will be studied. Three class hours weekly.

MFG*H201 Computer-Aided Manufacturing II 3 credits
Prerequisites: MFG*H106. This course discusses CNC programming, analog programmable logic control programming, and interfacing controllers, and machine tools. Laboratory practice in writing CNC programs, robotics programming and interfacing, and analog programmable logic controller programming will be studied. Two class and two laboratory hours weekly.

MFG*H210 Materials of Engineering 4 credits
Prerequisites: MFG*H104, CHE*H111. Study of the structure and properties of engineering materials. Materials selection, processing and heat treatment are studied. The changes in structure and properties during forming, machining, and heat treating operations are discussed. Selected experiments to demonstrate the effects of processing, including heat treatment on the properties of engineering materials. Standard materials tests are also performed. Three class and two laboratory hours weekly.

MFG*H217 Tool Design 5 credits
Prerequisites: CAD*H150, MFG*H104, 210, MAT*H185. The course is designed to teach the theoretical principles, commercial standards and techniques for the design of metal cutting tools, jigs, fixtures, gages and dies. Application of the theory and principles learned in the classroom to design problems. The design problems will include metal cutting tools, jigs, fixtures, gages and dies. Three class and four laboratory hours weekly.

MFG*H230 Statistical Process Control 3 credits
Prerequisites: MAT*H172. Presents a modern approach to quality adapted from the science of statistics. The scope of study ranges from basic statistical concepts, through the history of statistical quality control and the contributions of pioneers like Deming, Juran and Taguchi. Traditional methods of control charts for both variables and attributes and acceptance sampling are presented, as well as the more modern methods. Simple, effective graphical problem-solving tools, histograms, run charts, stem and leaf displays, Pareto charts, cause and effect diagrams and capability ratios (CP & CPK) are covered. The computer is utilized as an aid in calculation and control chart preparation. Two class and two laboratory hours weekly.

MFG*H239 Geometric Dimensioning and Tolerancing 3 credits
 A study of the industrial accepted ANSI Specification Y14.5-1973 and ANSI Y14.5M-1982. The ANSI Y14.5 specification creates a unified language through which engineering requirements are specified with respect to actual function and relationship of parts features. Subject matter includes the application of form, profile, orientation, runout, and location types of geometric characteristics, including the application of the feature control frame and tolerance and datum modifiers. Three class hours weekly.

MFG*H248 Computer-Integrated Manufacturing (CIM) 3 credits

Prerequisites: MFG*H201. This course discusses computer generated CNC programming and computer based additive manufacturing techniques. In addition students will gain an understanding of how to use Mastercam to generate programs for both milling and turning applications. Laboratory includes hands on application of course theory. Two class and two laboratory hours weekly.

MFG*H254 Manufacturing Machinery - Lathe II 3 credits

Prerequisite: Completion of Machine Technology Level I Certificate or with consent of instructor, MFG*H154: Manufacturing Machinery - Lathe I. Second course on lathe setup, operation and practices. Topics covered include alignment, turning between centers, and other operations. The student will cut 60 degree external threads, internal threads, tapers, and other thread forms. Use of steady rests and follower rests.

MFG*H255: Manufacturing Machinery - Milling II 3 credits

Second course on milling setup, operation, and practices. Topics covered include use of Offset Boring Head, side milling cutters, face milling cutters on the horizontal mill, setup and operation of index heads, simple and direct angular indexing, and inspection of gears. Prerequisite: Completion of Machine Technology Level I Certificate or with consent of instructor, MFG*H155: Manufacturing Machinery - Milling I

MFG*H256 Manufacturing Machinery - CNC II 3 credits

Second course in Computer Numerical Controlled programming. A further study of CNC programming for the Lathe and Vertical Machining Center. Topics include setup and tooling, programming simple parts, canned drilling cycles, circular interpolation, special milling cycles, cutter compensation, looping and macros, and special features. Prerequisite: Completion of Machine Technology Level I Certificate, or with consent of instructor, MFG*H156: Manufacturing Machinery - CNC I

MFG* H271 Advanced Lean Manufacturing 3 credits

Prerequisite: MFG*H171. 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.

MFG* H272 Implementing Lean Supply Chain Management 3 credits

Prerequisite: MFG*H172. 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.

MFG*H275 Mechanics of Materials 3 credits

Prerequisite: MEC*H114, MAT*H185. The study and explanation of the relationships existing between externally applied forces in resulting stresses in deformations. From our study of mechanics of material, we will be able to determine if a body is capable of fulfilling its intended purpose. Limited computer applications of beam theory and a computer demonstration of FEA. Three (3) class hours weekly.

MARKETING

Refer to the Business section.

**MATHEMATICS
Science, Technology, Engineering & Mathematics
Division**

MAT*H092 Statway I 4 credits

(developmental – no credit toward degree or transfer)
Prerequisite: Successful completion of EDUC 5016 (Transitional PreAlgebra) or an appropriate score on a college placement exam. Corequisite of ENG *H063 or qualifying score on placement exam, or permission of Chair of Mathematics Department. Statway I is the first of two courses offering an alternative pathway for students in non-STEM (Science, Technology, Engineering, Mathematics) majors. These courses will combine elements of algebra and statistics into one curriculum. Students will take these courses instead of MAT *H095 (Elementary Algebra), MAT *H137 (Intermediate Algebra), and MAT *H167 (Principles of Statistics). The goal is to significantly improve the retention rate in developmental mathematics.

MAT*H094 Introductory Algebra 3 credits

Prerequisite: Successful completion of EDUC 5016 (Transitional PreAlgebra) or an appropriate score on a college placement exam. The course begins with a brief review of basic computational skills and operations with signed numbers. Algebraic order of operations and evaluation and simplification of algebraic expressions are followed by techniques for solving first degree equations and inequalities in one unknown. Also included in this course are algebraic methods for solving applications involving one and two unknowns. Basic rules of exponents are presented and scientific notation is discussed. This is followed by the basic polynomial operations and graphing linear equations in two unknowns, finding slopes of lines, x- and y- intercepts, and writing the equations of lines. This will not fulfill a mathematics requirement in any degree program.

MAT*H095 Elementary Algebra Foundations 3 credits

Prerequisite: Successful completion of EDUC 5016 (Transitional PreAlgebra) or an appropriate score on a college placement exam. The course begins with a brief review of basic computational skills and operations with signed numbers. Algebraic order of operations and evaluation and simplification of algebraic expressions are followed by techniques for solving first degree equations and inequalities in one unknown. Also included in this course are algebraic methods for solving applications involving one and two unknowns. Basic rules of exponents are presented and scientific notation is discussed. This is followed by the basic polynomial operations and graphing linear equations in two unknowns, finding slopes of lines, x- and y- intercepts, and writing the equations of lines. This will not fulfill a mathematics requirement in any degree program.

MAT*H121 Applications for Business and Other Careers 3 credits

Prerequisite: Grade of "C" or better in MAT*H094 (Introductory Algebra) or MAT*H095 (Elementary Algebra) or an appropriate score on a college placement exam. Enrollment in MAT*H121 is restricted to specific programs. Topics covered include arithmetic and algebraic operations, statistics, graphs, and tables. This course emphasizes specific mathematical applications for each discipline.

MAT*H122 Statway II 4 credits

Prerequisite: C or better in MAT *H092 (Statway I). Statway II is the second course in the two semester Statway course sequence. The Statway course sequence is recommended for students enrolled in degree programs that require no mathematics beyond freshman-level statistics. Both courses in the course sequence (Statway I and Statway II) may be used to receive credit for college level statistics with Division Director Approval. Students will use mathematical and statistical tools to explore real life data in a participatory learning environment. Statway II topics include modeling data with functions, quadratic functions, discrete and continuous probability distributions, Central Limit Theorem, sampling distributions, confidence intervals, one-sample and two-sample hypothesis tests, Chi-Square Tests, and ANOVA. This course requires the use of statistical technology.

MAT*H135 Topics in Contemporary Mathematics 3 credits
*Prerequisite: Grade of "C" or better in MAT*H094 (Introductory Algebra) or MAT*H095 (Elementary Algebra) or an appropriate score on a college placement exam.* A practical course offering an exposure to a wide range of topics with an emphasis on critical thinking, problem solving and the real number system. **Topics include number theory, financial management, set theory, metric system and statistics. This course will not satisfy the General Education mathematics requirement at CT State Universities.**

MAT*H136 Intermediate Algebra with Lab 4 credits
*Prerequisite: Grade of "C" or better in MAT*H094 (Introductory Algebra) or MAT*H095 (Elementary Algebra) or an appropriate score on a college placement exam.* This course initiates with the concepts of beginning algebra such as solving first degree equations and inequalities, applications and graphing of linear equations, and simplifying exponential expressions. The course also includes concepts of intermediate algebra such as factoring techniques. The study of polynomial functions is extended via applications involving linear functions, linear systems, and quadratic functions. Students also study exponential functions, rational functions, radical functions, and absolute value functions.

MAT*H137 Intermediate Algebra 3 credits
*Prerequisite: Grade of "C" or better in MAT*H094 (Introductory Algebra) or MAT*H095 (Elementary Algebra) or an appropriate score on a college placement exam.* The main themes of Intermediate Algebra are functions, represented by tables, graphs, and rules, and problem solving. The study of polynomial functions is extended via applications involving linear functions, linear systems, and quadratic functions. Students also study exponential functions, rational functions, radical functions, and absolute value functions. Computer component required; TI-83 (Plus) or TI-84 (Plus) or online graphing utility required. **This may be used as a general elective; this will not fulfill a mathematics requirement in any degree program.**

**MAT*H143 Math for Elementary Ed:
Algebra, Number Systems 3 credits**
*Prerequisite: Grade of "C" or better in MAT*H136 (Intermediate Algebra with lab) or MAT*H137 (Intermediate Algebra) or an appropriate score on a college placement exam.* This course is designed for students planning to become certified in early childhood, elementary or middle school level education. Problem solving strategies will be developed and integrated throughout, in accordance with the NCTM *Principles and Standards for School Mathematics*. Topics include conceptual and relational understanding of the real numbers, including the subsets of whole numbers, integers, rational and irrational numbers, with an emphasis on place value and the associated operations. Topics from numeration systems, number theory, and set theory will be developed as needed, with regular use of manipulatives and technology.

**MAT*H144 Math for Elementary Ed:
Geometry, Data 3 credits**
*Prerequisite: Grade of "C" or better in MAT*H136 (Intermediate Algebra with lab) or MAT*H137 (Intermediate Algebra) or an appropriate score on a college placement exam.* This course is designed for students planning to become certified in early childhood, elementary or middle school level education. Problem solving strategies will be developed and integrated throughout, in accordance with the NCTM *Principles and Standards for School Mathematics*. Topics include probability, statistics, and geometry concepts presented through a problem-solving approach, and incorporating an extensive use of manipulatives and geometric software. Mathematical discourse is encouraged through cooperative learning and written communication.

MAT*H146 Math for the Liberal Arts 3 credits
*Prerequisite: Grade of "C" or better in MAT*H136 (Intermediate Algebra with lab) or MAT*H137 (Intermediate Algebra) or an appropriate score on a college placement exam.* This is a survey course designed to acquaint the liberal arts student with a broad spectrum of mathematical ideas not emphasized in traditional algebra courses. As a terminal mathematics course, it conveys the nature and diversity of mathematics, its methods, applications, and roles in society. Topics are selected from problem solving and critical thinking skills, graph theory, voting and apportionment, introduction to probability, linear programming, patterns and symmetry, linear and exponential applications; others may include fractal geometry, financial management, fair division schemes, game theory, or codes.

MAT*H167 Principles of Statistics 3 credits
*Prerequisite: Grade of "C" or better in MAT*H136 (Intermediate Algebra with lab) or MAT*H137 (Intermediate Algebra) or an appropriate score on a college placement exam.* This technology-based course begins with an introduction to data analysis including techniques in the presentation of data and in the determination of statistical measures for central tendency and variation. The topics of linear correlation and regression are explored in the analysis of bivariate data. The basics of probability are presented prior to a thorough examination of discrete and continuous probability distributions. Emphasis is placed on the binomial and normal distributions. Estimation and hypothesis testing for population means are introduced. As time permits, statistical inference techniques for proportion, variance and the difference of means will be presented.

MAT*H170 Math Education in Practice 1 credit
*Prerequisite: Grade of "B" or better in MAT*H172 with two letters of recommendation from instructors at NVCC and permission of the Division Director or Math Department Chair.* This course provides students the opportunity to develop their communication skills in mathematics. Students will assist and tutor peers in mathematics using appropriate technology for a minimum of three hours per week for 14 weeks in the Academic Center for Excellence at Naugatuck Valley Community College under the supervision of a math instructor. The course may be taken up to three times for a maximum of 3 credit hours.

MAT*H172 College Algebra 3 credits
*Prerequisite: Grade of "C" or better in MAT*H136 (Intermediate Algebra with lab) or MAT*H137 (Intermediate Algebra) or an appropriate score on a college placement exam.* This course offers the student the development of numeric, algebraic, and graphic problem solving techniques beyond the intermediate level. Techniques are developed to solve equations and inequalities involving polynomials, radicals and rational expressions. Polynomial, inverse, rational, exponential, and logarithmic functions are studied and their applications are explored both algebraically and graphically.

MAT*H185 Trigonometric Functions 3 credits
*Prerequisite: Grade of "C" or better in MAT*H172 (College Algebra) or an appropriate score on a college placement exam.* This course offers the student a development of trigonometry through a functional approach. The trigonometric functions are considered as circular functions with applications of these to the solution of triangulation problems. Topics include trigonometric identities, inverse trigonometric functions, oblique triangle trigonometry and the graphs of the trigonometric functions. Vectors will be introduced and the polar coordinate system will also be considered.

MAT*H232 Applied Calculus 4 credits
*Prerequisite: Grade of "C" or better in MAT*H172 (College Algebra) or an appropriate score on a college placement exam.* The purpose of this course is to acquaint students not majoring in mathematics or science with a body of mathematical knowledge that may well demand investigation in view of their various academic goals. Topics covered include function theory, inequalities, tangent problems, continuity, limits, derivatives, and integrals.

MAT*H254 Calculus I **4 credits**
Prerequisite: Grade of "C" or better in MAT*H185 (Trigonometric Functions) or an appropriate score on a college placement exam. A four semester hour course intended to provide the necessary preparation for advanced mathematics and science courses as requirements for all mathematics/science majors. The course begins with a review of the properties of absolute value and inequalities and other algebraic topics. Functions, limits, and continuity are thoroughly covered along with the derivatives. Formulas for calculating derivatives are presented, along with geometrical and physical applications. The antiderivative is introduced along with the definition of the differential and some applications. The course concludes with an introduction to the definite integral and its geometric meaning.

MAT*H256 Calculus II **4 credits**
Prerequisite: Grade of "C" or better in MAT*H254 (Calculus I) A second course in calculus for mathematics or science majors. Topics include the definite integral and applications of the definite integral to areas, volumes, and length of arc of a plane curve. Also considered are logarithmic and exponential functions, trigonometric functions, inverse trigonometric functions and various techniques of integration. Limits involving indeterminate forms and improper integrals are also discussed. The course concludes with an introduction to infinite series.

MAT*H268 Calculus III: Multivariable **4 credits**
Prerequisite: Grade of "C" or better in MAT*H256 (Calculus II). A course in multivariable calculus for mathematics or science majors. Topics include conic sections, plane curves, parametric equations and polar coordinates, vectors and solid analytic geometry, vector-valued functions, functions of several variables, partial differentiation, and multiple integration.

MAT*H285 Differential Equations **3 credits**
Prerequisite: Grade of "C" or better in MAT*H256 (Calculus II) Study of ordinary differential equations. Equations studied include the following: first-order linear, separable equations; exact equations; homogeneous linear equations of first or higher order with constant coefficients; auxiliary equations with complex roots; and non-homogeneous equations. Solutions of initial value problems with associated applications are studied. Techniques used include linear differential operators, the method of undetermined coefficients, variation of parameters, and Laplace transforms.

MECHANICAL ENGINEERING TECHNOLOGY **Science, Technology, Engineering & Mathematics** **Division**

MEC*H114 Statics **3 credits**
Prerequisites: TCN*H101, MAT*H172 and PHY*H121. *Corequisite:* MAT*H185. Analysis of the forces which act upon particles and rigid bodies at rest. Balances of forces and moments on an object provide the basis for equilibrium calculations involving points, rigid bodies, trusses, frames and machines with a variety of supports, including frictional. The concepts of centroids, center of gravity and moment of inertia are also introduced. Three class hours weekly.

MEC*H238 Dynamics **4 credits**
Prerequisites: MEC*H114, MAT*H254. This course covers the fundamental techniques used for analyzing the motion of particles and rigid bodies and the forces which cause that motion. Translation and rotation as fundamental components of rectilinear, curvilinear and constrained plane motion are explained. Relative and absolute velocities and accelerations are treated with both graphical and computational techniques. Laboratory practice is used to verify and reinforce the theoretical concepts. Three class and two laboratory hours weekly.

MEC*H240 Fundamentals of Heat and Thermodynamics **4 credits**
Prerequisite: CHE*H111 or permission of instructor. This course covers the fundamental concepts of heat transfer and thermodynamics. Major topics in heat transfer include conduction, convection and radiation and their application to heat exchangers. Major topics in thermodynamics include the First and Second Laws of Thermodynamics and their application to vapor-power and refrigeration cycles. Laboratory experiments will supplement the theoretical class work. Three class and two laboratory hours weekly.

MEC*H251 Materials Strength **4 credits**
Prerequisite: MEC*H114. Covers the principles involved in the analysis of stresses which occur within machine and structural elements subjected to various types of loads. Analysis of these stresses are made as applied to thin-walled cylinders and spheres, beams, columns, couplings and shafts. Laboratory experiments supplement and reinforce theoretical class work. Three class and two laboratory hours weekly.

MEC*H271 Fluid Mechanics **4 credits**
Prerequisite: MEC*H114. An introductory survey of the principles and methods involved in the analysis of fluid systems. Included are common fluid properties, hydrostatics, the kinematics of fluid flow and energy relationships. Laminar and turbulent flow in piping systems are analyzed. Laboratory experiments supplement and reinforce theoretical class work. Three class and two laboratory hours weekly.

MEC*H284 Machine Design **4 credits**
Prerequisites: CAD*H150 and MEC*H251, or permission of instructor. Deals with the concept of mechanical design from concept to specifications. Covers the procedures, data, and techniques necessary to design/select mechanical components such as gears, springs, bearings, belt and chain drives, clutches, brakes, fasteners, shafts and screws. A design project is also included. Three class and two laboratory hours weekly.

METEOROLOGY **Science, Technology, Engineering & Mathematics** **Division**

MET*H101 Meteorology **3 credits**
 An introductory course on weather and climate. Through lecture, internet access and other media, this course will cover atmospheric motion, severe weather, global and local climate, and forecasting.

MULTIMEDIA TECHNOLOGY **Liberal Arts and Behavioral/Social Sciences Division**

Multimedia Technology courses are now listed under a new designation. Please refer to the Digital Arts Technology section for a list of these courses.

MUSIC **Liberal Arts and Behavioral/Social Sciences Division**

The Division of Liberal Arts and Behavioral/Social Sciences encourages students to register for music courses in order to develop appreciation of, and skills in, the musical arts. Some of the courses are required in career programs; others are designed for students' interests and personal development. Consultation with counselors will help determine specific needs.

MUS*H101 Music History & Appreciation I **3 credits**
 The course surveys historically significant music from the medieval period to the 20th century, emphasizing stylistic characteristics found in great music, art, and architecture.

MUS*H111 Fundamentals of Music I 3 credits

This course begins the study of notation and forms that musicians use to arrange, compose and perform music. Topics include musical instruments, clefs, key signatures, time signatures, scales, musical styles and forms.

MUS*H115 Music Theory I 3 credits

Music Theory I is a study of melodic writing leading to four-part diatonic harmony. Topics include four-part writing, non-chord tones, cadences, and seventh chords. Music analysis, reading, and aural skills are reinforced together with the Theoretical material presented.

MUS*H116 Music Theory II 3 credits

*Prerequisite: Grade of "C" or better in MUS*H115 or Permission of Instructor.* This is a continuation of MUS*H115 with a study of secondary functions, modulation, form and counterpoint. Music analysis, reading, and aural skills are developed together with the theoretical material presented.

MUS*H156 Guitar Ensemble 2 credits

This is an opportunity for guitarists and bassists to experience reading and improvising in the context of a section, rather than the traditional rock or jazz band format. The goal is to raise sight reading levels while learning the art of ensemble playing. Special attention is paid to dynamics, phrasing, intonation, ensemble playing, and general musicianship. This course may be repeated for credit.

MUS*H157 Jazz Ensemble 2 credits

Students and community members will perform in a small instrumental group jazz and contemporary charts from the Big Band Era to Fusion Rock. Instruments featured are percussion, bass, key board, guitar, saxophone, trumpet, and trombone. The course is open to all students with the consent of the instructor, and may be repeated for credit.

MUS*H158 Chamber Music / Jazz Ensemble I 2 credits

Students and community members will perform jazz and contemporary charts from the Big Band Era to Fusion Rock in a small instrumental group. Featured instruments include percussion, bass, keyboard, guitar, saxophone, trumpet, and trombone. The course is open to all students with the consent of the instructor.

MUS*H161 Chorale I 2 credits

Performance of choral repertoire from all stylistic periods is studied. Performances occur at the College and in the community. The course is open to all students as well as members of the community, with the consent of the instructor and may be repeated for credit.

MUS*H163 Ear Training I 1 credit

The goal of Ear Training I is to acquire the skills necessary to make intelligent and competent musicians. This course will focus on three major areas; sight singing, rhythmic reading, and dictation. This course is considered to be an aural lab component of Theory I and is an important course for those wishing to improve their pitch accuracy for the Chorus audition or Voice Lessons.

MUS*H164 Ear Training II 1 credit

*Prerequisite: MUS*H163 or permission of instructor.* The goal of Ear Training II is to continue the work done in Ear Training I providing students with advanced training in pitch and rhythm, perception and sightreading. It is considered to be an aural lab component of Theory II courses and is an important course for those wishing to improve their pitch accuracy for Chorus or Voice lessons.

MUS*H173 Class Voice 1 credit

Principles of voice placement and development, breathing, diction and production are practiced. Solo and duet repertoire are explored. This is designed as a beginner class for students with little or no experience. The course may be repeated for credit.

MUS*H183 Applied Private Music Lessons I 1 credit**MUS*H184 Applied Private Music Lessons II 2 credits**

These courses provide for private vocal or instrumental lessons. Fees for lessons are in addition to regular tuition and arranged between student and the teacher, who must be approved by the Music Director. Applied lessons are intended for students with some musical experience or background.

MUS*H208 Introduction to Music Therapy 3 credits

*Prerequisites: MUS*H111 Fundamentals of Music with a grade of "C" or better, or permission of instructor.* Introduction to Music Therapy provides a historical, theoretical, and clinical basis for defining and understanding music therapy and/or continuing its study. It is designed as a survey course to give historical background to the development of the profession, as well as basic understanding of techniques and populations now served by music therapists. Basic music proficiencies are helpful but not required for enrollment in this course.

MUS*H213 Music Theory III 3 credits

*Prerequisites: MUS *H116 with a grade of "C" or better, or permission of instructor.* Music Theory III provides training and supervised practice of analyzing, performing, and composing music. Music Theory III is a continuation of Music Theory II and should be taken concurrently with Ear Training III. Secondary chords, altered 6th chords, chromatic harmony, and modulation are mastered. Song writing is pursued as a means of understanding harmonic rhythm, progressions, accompaniment patterns, and small form structure. Keyboard proficiency is included.

MUS*H214 Music Theory IV 3 credits

*Prerequisites: MUS *H213 with a grade of "C" or better, or permission of instructor.* Music Theory IV provides training and supervised practice of analyzing, performing, and composing music. Music Theory IV is a continuation of Music Theory III and should be taken concurrently with Ear Training IV. Enharmonic modulation is introduced along with extended and chromatic harmony. Larger formal patterns are discussed (sonata form, rondo, and variation). 20th-century harmony is introduced, including non-functional harmony, dodecaphony, and set theory. Keyboard proficiency is included.

MUS*H218 Electronic Music Composition/Audio Technology I (also listed as DAT*H218) 3 credits

*Prerequisite CSA*H105 and permission of instructor.* This course is an introduction to the art and techniques of electronic music and audio production. The history, elements, and tools of electronic music and audio will be defined and explored. Topics will include; acoustics theory, analog and digital audio principles, recording engineering techniques, sound sampling, electronic synthesis, MIDI, and audio for multimedia and the World Wide Web.

MUS*H219 Electronic Music Composition/Audio Technology II 3 credits

*Prerequisite: DAT*H218 or MUS*H218.* An in-depth study of the techniques and methodologies used in studio and live recording. In addition to classroom assignments and exercises, students will be expected to complete a minimum of fifteen hours of practicum field work resulting in the recording, editing and mastering of a live or studio project. Topics will include two-track and multi-track recording, studio acoustics and design, analog and digital mixing consoles, microphone placement techniques, signal processors, and studio session procedures.

MUS*H237 Principles of Sound Recording (also listed as DAT*H237) 3 credits

*Corequisite: DAT*H218 or MUS*H218.* This course presents an in-depth study of the techniques and methodologies used in studio and live recording. In addition to classroom assignments and exercises, students will be expected to complete field work resulting in the recording, editing, and mastering of a live or studio project. Topics will include two-track and multi-track recording, studio acoustics and design, analog and digital mixing consoles, microphone placement techniques, signal processors, and studio session procedures.

MUS*H254 Concert Band 2 credits

This is a modern, symphonic concert band featuring woodwind, brass, and percussion instruments. The band performs for college functions (such as commencement) and for the benefit of the college. The band may perform at other off-campus venues and for non-campus organizations. The instructor selects repertoire each semester based on the available instruments and skill level of players, as well as picking repertoire suitable for college activities. The repertoire represents the work of both serious “classical” composers as well as contemporary popular composers. The course is open to all students with the consent of the instructor and may be repeated for credit.

MUS*H263 Ear Training III 1 credit

*Prerequisites: MUS*H164 with a grade of “C” or better, or permission of instructor.* Ear Training III provides classroom training and supervised practice of connecting musical sounds to musical notation and harmonic systems. Ear Training III is a continuation of Ear Training II and should be taken concurrently with Music Theory III. Intervals, scales, and chords in all inversions are sung and identified. Melodies for singing and dictation gradually incorporate chromatic alterations and modulation. Keyboard harmony is reinforced.

MUS*H264 Ear Training IV 1 credit

*Prerequisites: MUS*H263 with a grade of “C” or better, or permission of instructor.* Ear Training IV provides classroom training and supervised practice of connecting musical sounds to musical notation and harmonic systems. Ear Training IV is a continuation of Ear Training III and should be taken concurrently with Music Theory IV. Sight singing, melodic dictation, keyboard harmony, and harmonic dictation incorporating chromaticism (secondary functions, mode mixture, N6, and augmented sixth chords), modulation to both closely and distantly related keys, and advanced rhythmic practices (syncopation, shifting meters, and hemiola).

MUS*H274 Conductor’s Lab Ensemble 2 credits

*Prerequisites: MUS*H115 Music Theory I or permission of the instructor. The course must be taken concurrently with MUS*H183 or MUS*H184 Applied Music – Conducting.* Learners are members of the College Choir. In addition to singing their particular voice part they also act as assistant conductors and are listed as such in concert programs. During the course of the semester assistant conductors utilize the baton and rehearsal techniques taught in the tutorials with the full choral group, either in the setting of a small group, voice section, or the entire chorus.

NURSING**Allied Health/Nursing/Physical Education Division****NUR*H101 Introduction To Nursing Practice 8 credits**

Prerequisite: Admission to the College and the Nursing Program. The student will focus on concepts basic to nursing practice. Emphasis is placed on application of the nursing process, communication skills, and nursing practice procedure acquisition. Clinical and laboratory experiences offer opportunities to integrate theoretical principles and demonstrate caring and competence in beginning professional role development.

NUR*H102 Family Health Nursing 8 credits

*Prerequisites: NUR*H101, PSY*H111, BIO*H235. Corequisite: NUR*H103.* The student will focus on issues affecting the family, including childbearing, childrearing, geriatric care and intermediate health care needs of limited duration. The medical surgical health problems include care for the client in the peri-operative period and the client experiencing orthopedic and simple genitourinary conditions. The course addresses several psychiatric disorders: anxiety and cognitive disorders, common child and adolescent psychiatric disorders. The student will have clinical rotations that provide experience caring for the childbearing family as well as caring for medical-surgical clients across the lifespan.

NUR*H103 Pharmacology for Families Across the Lifespan 1 credit

*Prerequisite: NUR*H101. Corequisite: NUR*H102.* The student will focus on the safe use, pharmacological principles, indications and nursing implications related to drug therapy when caring for individuals and families. Emphasis will be on medications used with perinatal, neonatal, pediatric, geriatric and peri-operative clients. The course will stress the general characteristics of selected medications and will include indications, pharmacokinetics, side effects, adverse effects, contraindications, administration, nursing implications across the lifespan, client education and relationship to prior learning.

NUR*H201 Nursing Care of Individuals and Families I 9 credits

*Prerequisites: NUR*H102, NUR*H103, PSY*H201, SOC*H101. Corequisite: NUR*H202.* The student will focus on holistic care of individuals and families across the lifespan with a variety of health care needs. The needs of clients experiencing endocrine, respiratory, gastrointestinal, cardiovascular conditions and selected mental health disorders are examined. Bioterrorism as a health care issue will be addressed. Clinical laboratory experience provides the student an opportunity to administer care to a diverse population of clients in a variety of acute care and community health care settings. The student will utilize critical thinking, caring, professionalism and communication skills in the care of the client. Emphasis is placed on provision of safe and competent care and development of the professional role as a member of a multidisciplinary health care team. Over the semester, the student is increasingly challenged in the clinical area with more complex client assignments.

NUR*H202 Pharmacology for Individuals and Families with Intermediate Health Care Needs 1 credit

*Prerequisite: NUR*H102, NUR*H103. Corequisite: NUR*H201.* The student will focus on pharmacologic principles related to the care of individuals and families across the lifespan with intermediate health care needs. Emphasis will be placed on medications used for clients who have endocrine, gastrointestinal, respiratory, cardiovascular, autoimmune, and psychiatric conditions and clients who are survivors of bioterrorism.

NUR*H203 Nursing Care of Individuals and Families II 8 credits

*Prerequisite: NUR*H201, NUR*H202, ENG*H102. Corequisite: NUR*H204, NUR*H205.* The student will focus on the holistic care of individuals, families, and groups with complex health care needs. The student will incorporate critical thinking, caring behaviors, professionalism, and communication skills when providing nursing care in a variety of acute, long-term and/or community settings. Students will have an opportunity to manage a multi client assignment with an emphasis on safe and competent practice. An observational experience with a visiting nurse agency, a dialysis unit and/or a cancer center will be provided.

NUR*H204 Pharmacology for Individuals, Families and Groups with Complex Health Care Needs 1 credit

*Prerequisite: NUR*H201, NUR*H202. Corequisite: NUR*H203.* The student will focus on safe use, pharmacologic principles, indications and nursing implications related to drug therapy in the care of individuals, families, and groups with complex health care needs. Emphasis will be placed on medications used for clients who have acute and chronic renal failure, oncology and neurological conditions, and multi-system dysfunction and who choose an alternative therapy.

NUR*H205 Nursing Management and Trends 2 credits

*Prerequisite: NUR*H201, NUR*H202. Corequisite: NUR*H203, NUR*H204.* The student will explore the basic principles of management, leadership and collaborative relationships as they relate to providing safe and competent care. The focus is on the utilization of critical thinking skills to make decisions on priority setting, delegation, legal parameters of nursing practice and ethical issues. Students will expand the concept of caring to the profession of nursing through collegial and interdisciplinary communication. This course facilitates the transition for students into the profession and their role in contemporary nursing practice.

PHILOSOPHY**Liberal Arts and Behavioral/Social Sciences Division****PHL*H101 Introduction to Philosophy 3 credits**

Prerequisite: ENG*H101. Various philosophical views and philosophical figures will be studied. Students will begin to think in a philosophical way about reality, truth and values. They will use logical reasoning to apply the various philosophies to current times and to their own lives.

PHL*H111 Ethics 3 credits

Prerequisite: ENG*H101. This course studies the approaches to ethics, ethical language, and interpretations of "Who am I?" and "What am I to do?" Morality as it relates to freedom, religion, medicine, business, mass media, technology, Environment and personal commitment are among the topics covered. Using logical reasoning, students demonstrate an understanding of ethical behavior in both oral and written form.

PHL*H112 Medical Ethics 3 credits

Prerequisite: ENG*H101. This course is an introduction to moral issues and options in medicine, with particular attention to those most directly affecting the public and general medical personnel. Topics include the meaning of "life," birth control, artificial insemination, genetic engineering, abortion, human experimentation, behavior control, organ transplantation, truth and the physician, care of the dying, and public health care.

PHL*H151 World Religions 3 credits

Prerequisite: ENG*H101. This course studies various living Eastern and Western religions and their beliefs about the meaning of life, God, reality, truth, morality and worship.

PHL*H150 Philosophy of Religion 3 credits

Prerequisite: ENG*H101. The nature of religion, the reality and existence of God, religious knowledge and values, the soul, life after death, the problem of evil, mysticism, miracles, and the relationship of religion to science and history are explored.

PHYSICAL EDUCATION**Allied Health/Nursing/Physical Education Division**

The Physical Education and Health Fitness courses at Naugatuck Valley Community College are designed to meet the life-time needs of the individual as teacher and person. Courses develop the basic skills and methodologies required for good physical and mental health. Courses have been recognized for transfer credit by four-year institutions. Activity course descriptions appear at the end of this section.

HPE*H101 Weight Control and Exercise 2 credits

Designed to help students realize the importance of healthy diet and exercise behaviors in permanent weight control. Behavior modification techniques are used to help students achieve a healthy lifestyle that will result in either a gradual reduction in body weight, and/or the maintenance of a healthy body weight.

HPE*H103 Concepts in Fitness 2 credits

Physical fitness and exercise is designed to provide the background information concerning exercise prescription development and follow through. Participants will be trained in exercise testing theory and ethics, and practical exercise prescription. Students will participate in lecture and laboratories to develop their own exercise prescription.

HPE*H114 Aerobics 2 credits

Modern methodologies skills and systems of exercising through dance are introduced and practiced. The physical condition of the body, the levels of cardiovascular fitness and individual physical differences are stressed.

HPE*H117 Weight Training 2 credits

Emphasis of this course is on the development of a high degree of individual skills and methods necessary to understand the body mechanics involved in activity exercise. Programs discussed will include training for leisure sports, rehabilitation, muscular tone, endurance, cardiovascular endurance, flexibility, and weight loss.

HPE*H118 Power Walking 2 credits

This course is designed to introduce students to the values and purposes of power walking through brief lecture and practical experience. The course will also introduce aerobics as an alternative program.

HPE*H140 Pilates/Wellness 1 credit
(also listed as DAN*H140)

This course focuses on the quality of movement, posture and breathing by increasing strength, flexibility, and balance. The holistic perspective includes physical awareness, cognitive reflection, and insights from feelings and focuses on mind-body centering. Pilates/Wellness is designed for the dancer, athlete, health professional or persons interested in overall well-being. This class meets the first ten weeks of the semester. Comfortable clothing is necessary.

HPE*H147 Self-Defense I 1 credit

This course is designed to promote the methods and skills to understand and perform the art of karate for self-defense and discipline. It includes the study of history, philosophy and culture of the martial art of karate.

HPE*H148 Self-Defense II 1 credit

Prerequisite: HPE*H147. This course is advanced study in the art and methods of self-defense including elements of physical fitness. Students who enroll in this course will be given a promotion test for belt certification.

HPE*H176 First Aid 3 credits

This course prepares the student, through development of skill and knowledge, to give proper care to the injured and seriously ill. This practical course stresses prevention of accidents and early medical care in sudden illness. Better personal health habits, family health habits, and an interest in community-wide health problems are developed. Red Cross First Aid Certification is included in the completion of coursework and meets the State of Connecticut requirements leading to a coaching permit.

HPE*H220 Coaching Adolescents 3 credits

This course consists of three modules: sports management, biomechanics studies, and principles of coaching. It is intended for those who do not hold a teaching degree and need to meet the State of Connecticut requirements for a coaching permit.

HPE*H255 Physical Fitness Through Physical Education 2 credits

This course will allow the student to explore several types of life-time and recreational sports. Students will rotate activities every three weeks throughout the semester. The physical education activities will be selected by the instructor.

HPE*H261 Yoga 1 credit

This course is designed to introduce students to the methods and skills necessary to understand and perform Yoga. Relaxation techniques and flexibility training are stressed.

HPE*H264 Yoga 2 credits

This course is designed to introduce students to the methods and skills necessary to understand and perform Yoga. Relaxation techniques and flexibility training are stressed.

PHYSICAL THERAPIST ASSISTANT
Allied Health/Nursing/Physical Education Division

PTA*H120 Introduction to Physical Therapy 3 credits

Prerequisite: Admission to the PTA Program. 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.

PTA*H125 PT for Function 4 credits

Prerequisite: Admission to the PTA Program. This lecture and lab based course, provides the student with introductory concepts and techniques for effective patient teaching and physical therapy interventions 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 with the plan of care developed by the supervising physical therapist. The laboratory section of this course allows the student to develop the psychomotor skills through simulated and actual patient scenarios.

PTA*H220 Introduction to the PT Clinic 1 credit

Prerequisites: PTA*H120 and PTA*H125 with a grade of "C" or higher. 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.

PTA*H230 Physical Agents in PT 4 credits

Prerequisites: PTA*H120 and PTA*H125 with a grade of "C" or higher. 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.

PTA*H235 Kinesiology for Rehabilitation 4 credits

Prerequisites: PTA*H120 and PTA*H125 with a grade of "C" or higher. 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.

PTA*H250 Therapeutic Exercise 5 credits

Prerequisites: PTA*H230 and PTA*H235 with a grade of "C" or higher. 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.

PTA*H253 Pathophysiology for Rehabilitation 3 credits

Prerequisites: PTA*H230 and PTA*H235 with a grade of "C" or higher. 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.

PTA*H258 PTA in the Healthcare Arena 2 credits

Prerequisites: PTA*H230 and 235 with a grade of "C" or higher. 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.

PTA*H260 Physical Therapy Seminar 2 credits

Prerequisites: PTA-H250, 253 and 258 with a grade of "C" or higher. In this 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.

PTA*H262 PTA Internship II 5 credits

Prerequisites: PTA*H250, 253 and 258 with a grade of "C" or higher. Within this clinic-based 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.

PTA*H265 PTA Internship III 5 credits

Prerequisites: PTA*H250, 253 and 258 with a grade of "C" or higher. Within this clinic-based 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.

PHYSICS
Science, Technology, Engineering & Mathematics
Division

PHY*H110 Introduction to Physics 4 credits

Prerequisite: MAT*H095 or equivalent. MAT*H137 is recommended. The course is designed for the student seeking basic introduction to the principles of physics, and offers firsthand experience on learning in a laboratory. Specific topics covered include: a review of essential arithmetic operations and systems of measurements, linear motion, conservation of energy and linear momentum, Newton's three laws of motion, gas laws, heat, light, electricity, magnetism and atomic theory, as time permits. Three hours of lecture and three hours of laboratory weekly.

PHY*H121 General Physics I 4 credits

Prerequisite: MAT*H137 or equivalent. *Corequisite:* MAT*H172. This course is designed for students in technical fields and pre-medicine programs. The course begins with a review of algebra, basic trigonometry and vectors. Topics covered include kinematics, projectile motion, Newton's Laws, energy, momentum, rotational dynamics, heat and thermodynamics, as time allows. Three hours of lecture and three hours of laboratory weekly.

PHY*H122 General Physics II 4 credits

Prerequisite: PHY*H121. This course is a continuation of PHY*H121. An overview of thermodynamics is given. Topics include waves, harmonic motion and Coulomb's Law. The laws describing electric and magnetic fields are studied and how these laws apply to DC and AC circuits, and the properties of light are presented. The properties of light discussed include reflection, refraction, interference and diffraction. Three hours of lecture and three hours of laboratory weekly.

PHY*H221 Calculus-Based Physics I 4 credits

Prerequisite: MAT*H254 or equivalent. This course is designed for students in technical fields, mathematics, or the physical sciences. Topics covered: Overview of the calculus necessary for physics, kinematics, Newton's laws, conservation laws, rotational dynamics, harmonic motion, gravitation, fluid mechanics, waves, sound, heat and thermodynamics. The lab portion of the course will concentrate on gathering data, analysis of data, and the discussion of results. The topics covered in lab will be coincident with the topics covered in the course. Three hours of lecture and three hours of laboratory weekly.

PHY*H222 Calculus-Based Physics II 4 credits
*Prerequisite: PHY*H221 or equivalent.* This course is designed for students in technical fields, mathematics, or the physical sciences. Topics covered: Overview of the calculus necessary for physics, heat, kinetic theory of gasses and thermodynamics (if not covered in PHY221). Electrostatics, magnetostatics, circuits (DC and AC), electrodynamics, waves and optics. The lab portion of the course will concentrate on gathering data, analysis of data, and the discussion of results. The topics covered in lab will be coincident with the topics covered in the course. Three hours of lecture and three hours of laboratory weekly.

POLITICAL SCIENCE **Liberal Arts and Behavioral/Social Sciences Division**

POL*H102 Introduction to Comparative Politics 3 credits
Prerequisite: 3 credit hours in any history or political science course. A survey of the structure and functioning of the governments is presented. Such contemporary nation states as Russia, Great Britain, France, and Germany are analyzed. A brief history of each government is included.

POL*H103 Introduction to International Relations 3 credits
 This course is an introduction to the present nation state system with an analysis of the political, social and economic pressures that produce international tensions and crises. Consideration of the traditional balance of power approach to world peace will be contrasted to the regional and global organizations that have appeared since World War II.

POL*H111 American Government 3 credits
 Students are acquainted with the organization, structure, and functions of the American national government and of the American political parties. Attention is paid to the Constitution, the congress, the courts and the presidency and administration.

POL*H112 State and Local Government 3 credits
 The structure and functions of the various state and local governments in the United States are studied. Special emphasis is placed on the state government in Connecticut and on the various types of local government in the state.

POL*H291-292 Practicum in Government I & II 6 credits
*Prerequisite: At least 15 credit hours of college work and a 2.6 average, plus a "B" grade in either ENG*H101 or BBG*H210.* Practical experience as a staff assistant to a member or committee of the Connecticut General Assembly or to a municipal government executive or agency is provided. At least 200 hours of practical work plus a biweekly seminar meeting of all student interns of NVCC are required. A 10-15 page term paper report will also be required at the end of the semester.

PORTUGUESE Refer to Languages.

PSYCHOLOGY **Liberal Arts and Behavioral/Social Sciences Division**

PSY*H111 General Psychology I 3 credits
*Prerequisite: eligibility for ENG*H101.* A general study of psychology in which the important basic principles of scientific methodology, theories of psychology, biological foundations of behavior, human development, states of consciousness, learning, memory, intelligence, and social psychology are presented.

PSY*H112 General Psychology II 3 credits
*Prerequisite: PSY*H111.* This course is a continuation of PSY*H111 with emphasis on the study of evolutionary psychology, sensation, perception, motivation, emotion, human sexuality, theories of personality, psychological disorders, and psychological treatment.

PSY*H201 Lifespan Development 3 credits
*Prerequisite: PSY*H111.* A study of the changes in the individual from infancy through late adulthood will be examined. Methodology and the physical, cognitive, and social development of the individual will be studied.

PSY*H203 Child Psychology 3 credits
*Prerequisite: PSY*H111.* This course examines the changes that occur in the individual from birth to the beginning of adolescence. Physical, cognitive, and social changes will be studied in the context of socio-cultural and other environmental influences that shape individual development.

PSY*H204 Child & Adolescent Development 3 credits
*Prerequisite: PSY*H111.* A study of the changes in the individual from infancy through adolescence will be examined. Methodology and the physical, cognitive, and social development of the individual will be studied.

PSY*H206 Adolescence & Adulthood Development 3 credits
*Prerequisite: PSY*H111.* This is a continuation of PSY*H204 with the emphasis on the period from adolescence through aging. Effective and intellectual functions from both the physiological and environmental view are examined.

PSY*H217 Psychology of Criminal Behavior 3 credits
*Prerequisite: PSY*H111.* This course presents a study of the psychological aspects and correlates of criminal behavior. Models are presented for predicting, understanding, and responding to criminal behavior.

PSY*H240 Social Psychology 3 credits
*Prerequisite: PSY*H111.* Dynamics of individual motivation in social situations, the theoretical bases for social behavior, applications of principles of behavior to attitude change, prejudice, public opinion, and individual reactions in mass behavior are examined.

PSY*H243 Theories of Personality 3 credits
*Prerequisite: PSY*H111.* This course presents a study of the underlying causes of individual behavior and experience. A wide range of theories is considered, including those from the psychoanalytic perspective, the trait perspective, the learning perspective and the humanistic perspective.

PSY*H245 Abnormal Psychology 3 credits
*Prerequisite: PSY*H111.* The varieties of abnormal behavior found in man are studied. Such disorders as depression, anxiety disorders, psychotic conditions, alcoholism, drug addiction, the personality disorders, and sexual deviations are considered.

PSY*H247 Industrial & Organizational Psychology 3 credits
*Prerequisite: PSY*H111.* This course surveys the scientific methodology of work behavior as applied to selection, training, evaluation, and organizational factors such as leadership, communication, social environment, group dynamics and norms, stress, motivation, job design and satisfaction, supervision, conflict resolution, and technological change.

PSY*H250 Psychological Aspects of Human Sexuality 3 credits
*Prerequisite: PSY*H111.* This course will emphasize the intrapersonal, interpersonal, and psychological aspects of human sexual behavior. Subject matter will include, but will not be limited to, sex roles, sexuality across the life span, sexual attitudes, sexual arousal and dysfunction, sexual orientation, love and intimacy, the historical and cultural aspects of sexuality, legal issues, evolutionary psychology, and research methods.

PSY*H258 Behavior Modification 3 credits
*Prerequisite: PSY*H111.* A study of learning theories in which operant and classical conditioning are presented. The focus is on the use of the concepts and principles of applied behavior analysis in teaching functional skills and decreasing maladaptive behaviors in such situations as the home, school, group homes, and mental health settings. Research methods, history, and ethical issues of behavior modification are also reviewed.

PSY*H259 Laboratory in Behavior Modification 3 credits
*Corequisite: PSY*H258 or permission of the instructor.* A study of learning in which the principles of operant conditioning are presented using live animals. The focus is on the experimental analysis of behavior in the lab and the extension of these concepts and principles of applied behavior analysis in everyday life. Positive reinforcement, extinction, differential reinforcement, shaping, behavioral chaining, discrimination, stimulus control, establishing operations are discussed and demonstrated during lab sessions. Research methods, history, and ethical issues of using animals in psychology are also reviewed.

PSY*H260 Psychology of the Exceptional Child 3 credits
*Prerequisites: PSY*H111.* The psychology of children with disabilities including mental retardation, learning disabled, physically challenged, autism, communication, health disabilities, and emotional/behavioral disorders is presented.

PSY*H261 Introduction to the Autism Spectrum 3 credits
*Prerequisites: PSY*H111 or permission of the instructor.* A study of autism spectrum disorders in which students learn the principles and techniques currently employed to help children with autism spectrum disorders acquire functional language, appropriate social behavior, and general academic and living skills. The course will emphasize assessment, empirically supported best practices, Applied Behavior Analysis (ABA), functional behavior assessments, social skills development, communication, parent involvement, and understanding the individual.

PSY*H262 Applied Behavior Analysis 3 credits
*Prerequisites: PSY*H258 or permission of the instructor.* This course covers the purpose, rationale and methods used in conducting and interpreting functional analyses of challenging; advanced coverage of measurement methods used in behavioral intervention, and the application of specific behavioral teaching procedures, including prompting, reinforcement, shaping, chaining, error correction and generalization methods, and the development of behavior plans.

PSY*H295 Teaching Assistant in Behavior Modification Lab 3 credits
Prerequisite: Permission of the instructor. This course will give students the opportunity to work with a faculty member and receive feedback and supervision while developing critical teaching and organizational skills. Students will prepare lab materials, provide direction to other students during laboratory sessions, and assist with the care of the rats used in the behavior modification lab.

QUALITY ASSURANCE Science, Technology, Engineering & Mathematics Division

QUA*H114 Principles of Quality Control 3 credits
Prerequisite: Completion of Machine Technology Level I Certificate or with consent of instructor. This first course in statistical quality control provides an overview of the tools and techniques required in contemporary quality systems. Topics covered include determination of process capabilities, estimation of process standard deviation from sample data, use of control charts, and calculation of probability of simple events. Students will develop SPC and TQM Manufacturing plans.

RADIOLOGIC TECHNOLOGY Allied Health/Nursing/Physical Education Division

RAD*H112 Orientation to Radiology 3 credits
Prerequisite: Admission into the program. This course provides an orientation to radiology, basic radiation protection, ethics, medical terminology, communication, and patient care.

RAD*H113 Rad. Physics / Radiographic Quality I 3 credits
*Prerequisite RAD*H112 & H197.* The course content includes the production of x-rays, the x-ray circuit, radiographic equipment, and the interaction of x-rays with matter. Once learned, the student will utilize the preceding content, applying it to how the x-ray produces the image. The subject material includes introductory principles of radiographic quality, a general overview of radiographic film, intensifying screens, film processing, setting technical factors, and performing technical conversions.

RAD*H114 Contrast Media Procedures & Radiographic Quality II 3 credits
*Prerequisite RAD*H113 & H198.* The course content is divided between two main topics. The first half of the summer session will cover radiologic procedures involving the use of contrast media. Also discussed will be the hazards, complications, and risk factors of contrast media. The second half of the session is a continuation of Radiographic Quality I. Topics include image formation, technical conversions and critiquing the radiograph.

RAD*H200 Radiologic Physics & Diagnostic Imaging Modalities 3 credits
*Prerequisite: RAD*H114 & H199* This course provides the student with advanced study of fluoroscopy, physics, computed radiography, digital radiography, digital fluoroscopy, and quality assurance/quality control techniques used to evaluate radiographic imaging equipment

RAD*H215 Radiographic Pathology 3 credits
*Prerequisite: RAD*H200, H222, & H297* This course provides an overview of pathological conditions that are demonstrated with diagnostic imaging. Lecture material will include the cause and treatment of the disease. Pediatric radiology is also presented.

RAD*H217 Seminar in Radiology 3 credits
*Prerequisite: RAD*H215 & H298.* A case study approach provides a comprehensive investigation of patient care, emphasizing radiologic procedures.

RAD*H222 Radiobiology & Protection 3 credits
*Prerequisite: RAD*H114 & H199* Topics include Radiobiology, health physics, radiation safety, safety requirements for equipment, and protection.

RADIOLOGIC TECHNOLOGY CLINICAL COURSES

Practicum (clinical practice) in the Radiologic Technology Program involve a series of learning experiences and developed skills in hospitals, offices and imaging centers. *Students are periodically assigned to all sections within the department. (These experiences are offered in RAD*H197 through RAD*H299 in sequence.)*

RAD*H197 Clinical Practice I (fall) 2 credits
 Clinical Post conference focuses on orientation to radiology, positioning of chest, abdomen, and extremities.

RAD*H198 Clinical Practice II (spring) 2 credits
 Clinical Post conference focuses on positioning of the pelvic girdle, hip, vertebral column & trauma radiography.

RAD*H199 Clinical Practice III (summer) 2 credits
RAD*H297 Clinical Practice IV (fall) 3 credits
 Clinical Post conference focuses on positioning of skull and cross sectional anatomy.

RAD*H298 Clinical Practice V (spring) 3 credits
 Clinical Post conference focuses on cross sectional anatomy, CT & MRI physics.

RAD*H299 Clinical Practice VI (summer) 2 credits

RESPIRATORY CARE**Allied Health/Nursing/Physical Education Division****RSP*H112 Fundamentals of Respiratory Care 4 credits**

Prerequisite: Admission to the Program. A lecture-laboratory course that provides an introduction to basic principles of clinical respiratory care integrating physical principles of respiratory care throughout the course. Topics covered include: principles of infection control, medical gas therapy, aerosol and humidity therapy and basic patient assessment. Three hours of lecture and two hours of laboratory exercises weekly. Corequisite RSP*H121.

RSP*H121 Cardiopulmonary Anatomy and Physiology 3 credits

Prerequisite: Admission to the Program. This course includes an in-depth study of the anatomy and physiology of the pulmonary and cardiac system. Topics will include but are not limited to: the circulatory system, applied physiology and physical principles of the respiratory system and gas exchange. Emphasis will be placed on structure and function. Corequisite RSP*H112.

RSP*H131 Applied Pharmacology 3 credits

Prerequisites: RSP*H112, RSP*H121 with grades of "C" or better. This course includes the study of the composition, indications for and effects of medication administered to patients treated in the field of respiratory care. Emphasis is placed on drugs prescribed for the cardiopulmonary, renal and neurological system. Corequisite RSP*H141.

RSP*H141 Principles of Respiratory Care 4 credits

Prerequisites: RSP*H112, RSP*H121 with grades of "C" or better. This course introduces the student to basic principles of clinical respiratory care. Topics include but are not limited to: medical gas therapy, patient assessment, OSHA and infection control standards, oxygen therapy, aerosol therapy, bronchial hygiene therapy, hyperinflation therapy, ethics and professionalism, medical documentation. An integrated laboratory experience is included. Corequisites RSP*H180 and RSP*H131.

RSP*H151 Cardiopulmonary Pathophysiology and Diagnostics 3 credits

Prerequisites: RSP*H131, RSP*H141 with grades of "C" or better. This course focuses on the etiology, pathophysiology, clinical manifestations and treatment of various cardiopulmonary diseases and diseases that directly affect the cardiopulmonary system. Case application will be included. Corequisite RSP*H181.

RSP*H180 Clinical Practicum 1 credit

Prerequisite: Admission to the program. This course provides supervised clinical experience in providing basic respiratory care to patients. Clinical experiences will focus on the areas of chart review, documentation and reporting, bedside assessment, breathing exercises, infection control techniques, medical gas therapy, and aerosol drug delivery. Corequisites RSP*H141 and RSP*H131.

RSP*H181 Clinical Practicum II 2 credits

Prerequisites: RSP*H180, RSP*H141, RSP*H131 with grades of "C" or better. This course provides supervised clinical experience in providing respiratory therapy to medical floor patients. Clinical experiences will focus on bronchial hygiene therapy, hyperinflation therapy, bi-level ventilation, airway management, and arterial blood gas sampling. Students will also rotate to ancillary clinical sites focusing on respiratory therapy provided at extended care and rehabilitation facilities. Corequisite RSP*H151.

RSP*H201 Future Trends 2 credits

Prerequisites: RSP*H262, RSP*H270, RSP*H281 with grades of "C" or better. This seminar course focuses on the various current issues affecting respiratory care. Topics include but are not limited to: smoking cessation, pulmonary rehabilitation, communication styles for various age ranges, research methods and statistics. Corequisites RSP*H282 and RSP*H291.

RSP*H262 Advanced Principles of Respiratory Care 4 credits

Prerequisites: RSP*H151, RSP*H181 with grades of "C" or better. The course focuses on conventional and alternative forms of mechanical ventilation. Indications, application, discontinuation and physical effects of mechanical ventilation will be covered. In addition, non-invasive, home and pediatric mechanical ventilation strategies will be covered. This course includes an integrated laboratory that includes demonstrated competency with equipment prior to clinical application. Corequisites RSP*H270 and H281.

RSP*H270 Hemodynamic and Critical Care Monitoring 3 credits

Prerequisites: RSP*H151, RSP*H181 with grades of "C" or better. This course focuses on hemodynamic monitoring and assessment on the adult critical care unit. Topics include: EKG rhythm interpretation, central venous pressure monitoring, pulmonary artery pressure monitoring, ACLS overview and intracranial pressure monitoring. Corequisites RSP*H262 and RSP*H281.

RSP*H271 Pulmonary and Cardiovascular Diagnostics 2 credits

Prerequisite: RSP*H151 with grade of "C" or better. This course provides the student instruction on assessment of pulmonary function studies and other diagnostic procedures used within a pulmonary/cardiopulmonary laboratory setting. Topics include: stress testing, metabolic testing, rehabilitation techniques, sleep studies and research techniques.

RSP*H281 Advanced Clinical Practicum 2 credits

Prerequisites: BIO*H212, RSP*H151, RSP*H181 with grades of "C" or better. This course provides supervised clinical experience in providing respiratory therapy to intensive care patients. Clinical experiences will focus on mechanical ventilation of the adult patient. Corequisites RSP*H262 and RSP*H270.

RSP*H282 Advanced Clinical Practicum II 2 credits

Prerequisites: RSP*H262, RSP*H270, RSP*H281 with grades of "C" or better. This course provides supervised clinical experiences in the adult, neonatal, and pediatric intensive care units. Clinical experiences will focus on hemodynamic monitoring and assessment, respiratory care in the emergency setting, and continuous mechanical ventilation of the adult, neonate, and pediatric patient. Students will also complete an Advanced Cardiac Life Support (ACLS) course during this clinical practicum. Corequisites RSP*H201 and RSP*H292.

RSP*H291 Perinatal and Pediatric Respiratory Care 2 credits

Prerequisites: RSP*H270, RSP*H262, RSP*H281 with grades of "C" or better. This course provides the student with a comprehensive study of pediatric and neonatal respiratory care. Topics include but are not limited to: diagnostic and therapeutic procedures, cardiopulmonary pathophysiology, ventilator management, critical care techniques, PALS and NRP techniques and embryology. Corequisite RSP*H282.

SIGN LANGUAGE

Refer to Languages.

**SOCIOLOGY
Liberal Arts and Behavioral/Social Sciences Division****SOC*H101 Principles of Sociology 3 credits**

Prerequisite: Eligibility for ENG*H101. A general introduction to the science of sociology, including the "sociological imagination," theory and methods. Students are taught what is unique about the way in which sociologists view and analyze human behavior. The role of the social structure and how it affects our lives will be emphasized. There will also be an emphasis on how sociologists develop and test their hypotheses, as well as on various aspects of social life such as culture, groups and institutions, deviance and social control, inequality, ethnicity, and family.

SOC*H105 Family Dysfunction 3 credits.
Prerequisite: SOC*H101. This course is a comprehensive look at family dysfunction, including but not limited to family violence. We will explore the historical context, theoretical explanations, social character, causes, consequences of and possible solutions to family dysfunction, including intimate partner violence, substance abuse, and child abuse. We also will consider methodological and ethical issues in family dysfunction research and treatment.

SOC*H201 Contemporary Social Issues 3 credits
Prerequisite: SOC*H101. This course presents an analysis of current sociological issues with emphasis on social stratification, inequality and sociocultural dynamics. Topics include ageism, sexism, population growth and decline, racism, modernization, and technology.

SOC*H210 Sociology of the Family 3 credits
Prerequisite: SOC*H101 or equivalent. Students will examine marriage and family relationships from a sociological perspective, concentrating on first meetings through marriage, having and rearing a family, divorce, and remarriage. Topics considered include: gender roles, love relationships, sexual fulfillment, communication, dual-income marriages, and step-families.

SOC*H221 Social Inequality 3 credits
Prerequisite: SOC*H101. This course addresses the causes and consequences of inequality based on race, gender, ethnicity, age, religion, and disability through an examination of the social structure, culture, history, and social institutions of American society.

SOC*H225 Death and Dying 3 credits
*(also listed as HSE*H171)*
 An exploration of the stages of death and dying. Special emphasis will be placed on understanding grief and loss. The course will focus on the following: the dying person, sudden death and the effect on the family, cultural and economic issues, the broad moral aspects of death, and other related problems. (spring)

SOC*H240 Criminology 3 credits
Prerequisite: SOC*H101 or by permission of instructor. Students will examine problems of law and order from a sociological perspective. The formation of laws, the causes of crime, and societal responses to crime will be considered. Topics to be considered include law-making as a social process, social and psychological explanations of criminal behavior, courts, punishment, imprisonment, and rehabilitation. (fall)

SOC*H241 Juvenile Delinquency 3 credits
Prerequisite: SOC*H101 or permission of the instructor. Students will examine the nature of juvenile delinquency. Consideration will be given to major theories attempting to explain delinquent behavior. The history, philosophy, and current practices of the juvenile justice system in America will be presented.

SPANISH

Refer to Languages.

THEATER ARTS

Liberal Arts and Behavioral/Social Sciences Division

The Division of Liberal Arts and Behavioral/Social Sciences encourages students to register for theater courses in order to develop appreciation of, and skills in, the theater arts. Some of the courses are required in career programs; others are designed for students' interests and personal development. Theater students are required to engage in both performance and technical theater course work. Consultation with counselors will help determine specific needs.

THR*H101 Introduction to Theater 3 credits
 A survey of the historical development of Western dramatic literature from the Greeks to the present. This course also explores the essential hands-on components of the theater, including playwriting, acting, design, and crew, utilizing both creative and analytical projects.

THR*H110 Acting I 3 credits
 A practical approach to the art of acting, with special attention to the development of the actor's instrument, including voice, body, the senses, creativity, and interpretation. The course combines individual and group exercises and assignments.

THR*H120 Stagecraft 3 credits
 This course will examine the basic components of stagecraft and production techniques, with a focus on set construction and painting, lighting, properties, costumes, and production management. The course involves classroom study but includes hands-on application on stage productions. Three laboratory hours required.

THR*H190 Theater Practicum I 3 credits
 This course involves students in play production. Such areas as set construction, lighting, costuming, box office, running crew and stage managing will be explored through the process of rehearsing and mounting a play for performance. Three lab hours required.

THR*H210 Acting II 3 credits
Prerequisite: THR*H110. A continuation of the practical approach to the art of acting as outlined in Acting Techniques I. Emphasis on scene study and character development. Three additional rehearsal hours required.

THR*H225 Directing 3 credits
Prerequisite: THR*H101 and THR*H110. Basic methods and techniques in directing a play, with special emphasis on script analysis, methods of rehearsing, and working with actors. Assignment directing short scenes. Three rehearsal/laboratory hours required.

THR*H226 Musical Theater Production 3 credits
Prerequisite: by audition for performers. The practical application and collaboration of several performance areas and/or technical skills as they relate directly to a musical theater production. Areas include: acting, singing, dancing; set construction, lighting crew, sound crew, costume crew and stage management.

THR*H231 Drama 3 credits
Prerequisite: ENG *H102 or ENG*H200. The study of dramatic literature, analysis and critical writings about the great plays from the canon of world drama. Assigned readings may include plays by Euripedes, Shakespeare, Molière, Ibsen, Chekov, Williams, and Hansberry.

THR*H290 Theater Practicum II 3 credits
Prerequisite: THR*H190 or permission of instructor. This course provides a continuation of the activities as described in THR*H190, with an emphasis on either selected styles and methods, or playwriting and performance. Three lab hours required.

THR*H295 Theater Practicum III 3 credits
Prerequisite: THR*H290. This course provides a further continuation of the activities as described in THR*H290, with an emphasis on either selected styles and methods, or playwriting and performance as determined by the instructor. Three lab hours required.



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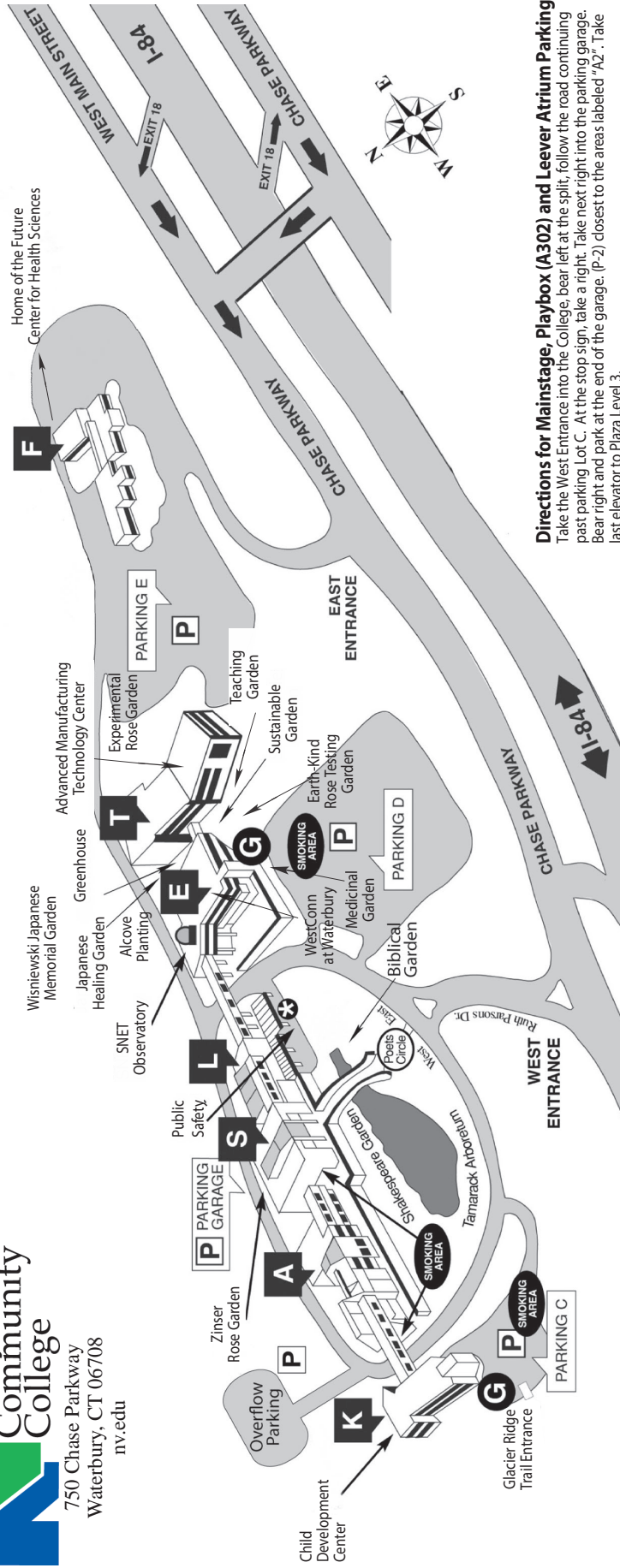
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- Z**
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- Zinych, Ulana,
Professor, Nursing



Directions for Mainstage, Playbox (A302) and Leever Atrium Parking
Take the West Entrance into the College, bear left at the split, follow the road continuing past parking Lot C. At the stop sign, take a right. Take next right into the parking garage. Bear right and park at the end of the garage. (P-2) closest to the areas labeled "A2". Take last elevator to Plaza Level 3.

Directions for Internal Rooms from Parking Garage
Note: The letter preceding a room number indicates the building the facility is located. See "Locations" section of this map for a complete legend.

Kinney Hall

Take the elevator or stairs to the 5th floor walkway. Take a left. Follow the walkway to Kinney Hall (you will be on level 5). Take elevator or stairs to levels 4, 6 and 7. **Information Booth is on level 5.**

Ekstrom Hall

Take elevator or stairs to the 5th floor walkway. Take a right. Follow the walkway to the end. Stairs straight ahead, elevator on the right to rooms on levels 3, 4 and 6. For rooms E518-E535, go straight out the doors and take a quick right into southside of the building.

Technology Hall

Take elevator or stairs to the 5th floor walkway. Take a right. Follow the walkway to the end. Go straight through the double doors and walk over the glass-walled bridge.

Cafeteria, Student Center Conference Rooms (S517 and S518), L501

Take elevators in area labeled S1 or S2. Take elevator or stairs to level 5 to access the 5th floor walkway. Conference rooms are straight ahead. Take a left from elevator/stairs to Cafeteria West. Entrance is on your left. Take a right from elevators to L501 which will be on your right past the Cafeteria East.

Fine Arts Center Rooms, Student Center and Library

Take elevators in areas labeled "A" for Fine Arts Center Rooms, "S" for Student Center Rooms and "L" for Library to the appropriate floor number. Main entrance to the Library is on Level 4.

Locations

- K** - Kinney Hall
- A** - Fine Arts Center/Theaters/Leever Atrium
- S** - Cistulli Student Center/Cafeteria
- L** - Traurig Learning Res. Center/Library
- E** - Ekstrom Hall
- T** - Technology Hall
- F** - Founders Hall
- P** - Parking Lots and Garages
Underground Parking Garages are located under buildings A, S, L & E and can be entered at designated areas. Watch For Signs.
- G** - Smoking Gazebos
- X** - Core Services: Public Safety C122
Maintenance, Receiving

Directions to the College

Route 8

Take the Danbury exit onto I-84, then first exit off I-84 (exit 18). Bear left at the fork and take a left at the light. Go to second light for East Entrance and third light for West Entrance.

I-84 West

Take exit 18, bear left at the fork and take a left at the light. Go to second light for East Entrance and third light for West Entrance.

I-84 East

Bridge exit 18. At light take a right and at next light take a right. Go over bridge and at light take a left onto Chase Parkway. Go to first light for East Entrance and second light for West Entrance.

The first entrance (east entrance) on the right will take you to Founders Hall, Ekstrom Hall and Technology Hall. The second entrance on the right (west entrance) will take you to garage parking, and Kinney Hall, Fine Arts Center, Student Center, Library, as well as Ekstrom Hall.