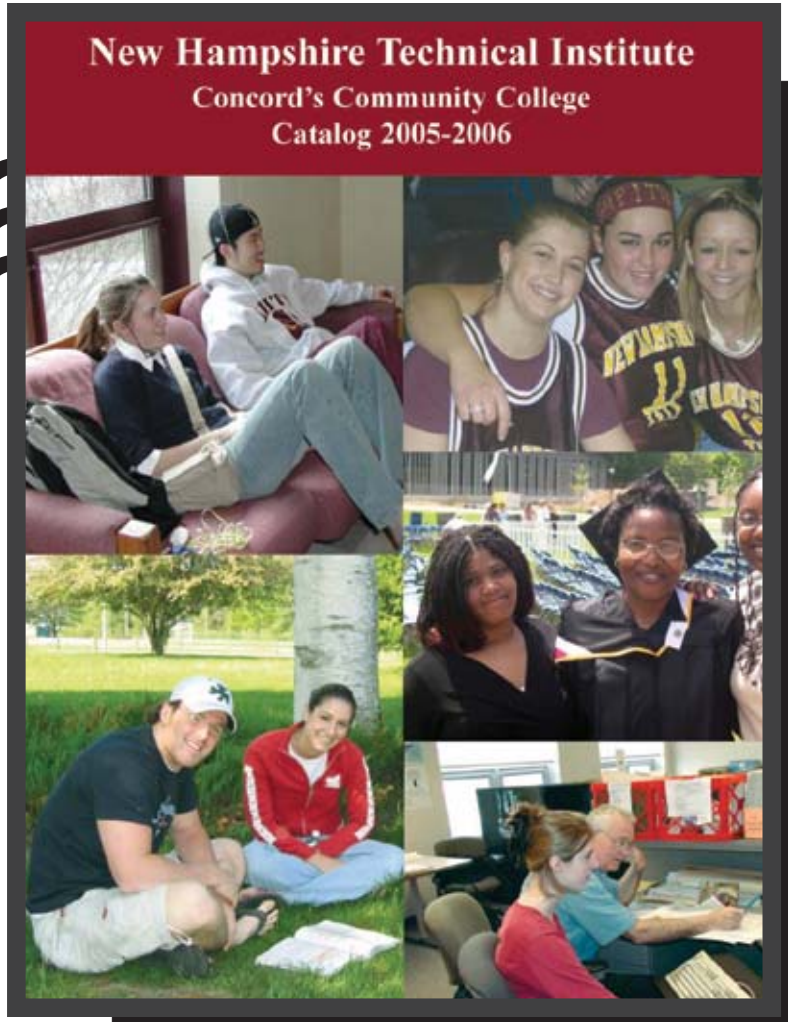


# New Hampshire Technical Institute

## Concord's Community College

## 2005-2006 Catalog

CollegeSource

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# How to Apply to NHTI

Complete the Admissions Application in this catalog, and mail or deliver to the Office of Admissions or apply on-line via our website at *www.nhti.edu*. Please be sure to review the general admission requirements and the specific requirements for the program of your choice. We welcome you to contact us to arrange for a campus visit.


Office of Admissions, Sweeney Hall
New Hampshire Technical Institute
31 College Drive
Concord, NH 03301-7412

(603) 271-7134 or 1 (800) 247-0179
TTY/VO: 603-271-7723
Website: www.nhti.edu
Email: nhtiadm@nhctc.edu
Fax: (603)271-7139


Our Admissions Staff hosts several Open Houses and other events on campus each year. Check our website regularly for dates and times at www.nhti.edu. We also visit high schools and participate in many college fairs throughout the region. Feel free to contact us for details.

Don't miss our Fall Open House,
Sunday, November 6, 2005, 12 noon - 2:30 pm.

## Statement of Nondiscrimination

New Hampshire Technical Institute does not discriminate in the administration of its admissions and educational programs, activities, or employment practices on the basis of race, color, religion, national origin, age, sex, disability, veteran status, sexual orientation, or marital status. This statement is a reflection of the mission of' the NH Community Technical College System and New Hampshire Technical Institute and refers to, but is not limited to, the provisions of the following laws:

- Title VI and VII of the Civil Rights Act of 1964, as amended
- The Age Discrimination Act of 1967 (ADEA)
- Title IX of the Education Amendment of 1972
- Section 504 of the Rehabilitation Act of 1973
- The Americans with Disabilities Act of 1990 (ADA)
- Section 402 of the Vietnam Era Veteran's Readjustment Assistance Act of 1974
- NH Law Against Discrimination (RSA 354-A)

Inquiries regarding discrimination may be directed to Eileen Fitzsimmons, Civil Rights/Equity Coordinator at New Hampshire Technical Institute, 31 College Drive, Concord, NH 03301, 603-271-2583, or to Sara A. Sawyer, Director of Human Resources for the NH Community Technical College System, 26 College Drive, Concord, NH 03301, 603-271-6300. Inquiries may also be directed to the US Department of Education, Office of Civil Kights, J.W. McCormack Post Office and Courthouse, Koom 701, 01-0061, Boston, MA, 02109-4557, 617-223-9662, FAX: 617-223-9669, TDD:617-223-9695, or Email: OCR_Boston@ed.gov ; the NH Commission for Human Rights, 2 Chennell Drive, Concord, NH 03301, 603-271-2767, FAX: 603-271-6339; and/or the Equal Employment Opportunity Commission, JFK Federal Building, 475 Government Center, Boston, MA, 02203, 617-565-3200 or 1-800-669-4000, FAX: 617-565-3196, TTY: 617-565-3204 or 1-800-669-6820

# Message From the President

***Lynn Tolbert Kilchenstein, President with alumnae Amanda Perreault(r) and Megan Burk(l)***

Welcome to New Hampshire Technical Institute! NHTI, Concord's Community College, offers a wide array of programs to students from throughout the state and New England region as well as to a growing number of students from around the country and the world.

Founded in 1965 with engineering technology programs that formed the first two years of the Bachelor of Engineering Technology degree at the University of New Hampshire, the college is now accredited by the Commission on Institutions of Higher Education and offers over thirty associate degree and diploma programs that prepare students for self-sustaining careers or for transfer at the junior level to baccalaureate programs at colleges across the country. In addition, a growing number of students with baccalaureate and graduate degrees come to our campus for technical skills or for personal enrichment.

As a former English professor at NHTI, I have personally taken great pleasure at the academic and personal growth of our students. Coming from a vast array of backgrounds and with equally diverse aspirations, the students are the heart and soul of NHTI; and my colleagues-the faculty, staff, and administration-are committed to serving each individual in a progressive, learning-centered community.

Please take some time to review our catalog and, even better, stop by our beautiful, 240-acre riverside campus. When you come, be sure to talk to a few students and faculty or staff. We might be the best place to help you shape and work toward your goals.

My Best Wishes,
Lynn Tolbert Kilchenstein
President

# History

Over the years since New Hampshire Technical Institute opened its doors in September of 1965, New Hampshire's largest residential community college has evolved into an institution that offers not only excellent technical education but also a broad array of academic, community service, and social/cultural opportunities. Full accreditation in the New England Association of Schools and Colleges' Commission on Institutions of Higher Education (CIHE), achieved in April 2001, has opened the doors to exciting opportunities that are strengthening NHTI's position in the state's higher education community and extending the pattern of steady growth developed during its 30+ years of accreditation by the Commission on Career and Technical Institutions.

From the original three technical programs, academic offerings have grown to over 60 associate degree, diploma and certificate programs. While professional programs remain the heart of education at NHTI, the College's Associate in Arts programs are increasingly being recognized as excellent, low-cost ways to begin one's baccalaureate education; and full CIHE accreditation has expanded already strong transfer options. The time has passed when classes were limited to campus locations and "business" hours, and the college now offers classes six days a week and every weekday evening, as well as distance learning opportunities, business and industry-specific training workshops, and courses at several off-campus locations.

From 16 original faculty, the roster has grown to nearly 100 full-time faculty, plus over 150 adjunct faculty. The faculty is characterized by a strong mix of academic and professional experience, which ensures that students receive up-to-date professional education and skills presented using creative teaching strategies. The college's commitment to life-long learning ensures that faculty and staff are provided with professional development opportunities to enhance both professional and pedagogical skills, such as pursuing advanced degrees, attending conferences and workshops, and engaging in reflective teaching and learning activities.

From a single librarian and a handful of clerical workers who established NHTI's long tradition of serving students, the number of support staff and the services they provide have grown to meet the needs of an expanding and increasingly diverse student population. The library, which opened in April 2001, has a dedicated staff that assists students with all their information needs, including print, audio, video, and electronic resources. The Learning Center, once a single room staffed by a single professional, is now housed in the library and provides tutoring, disabilities services, and other types of academic supports. The Multicultural Center helps international students and English-as-a-Second-Language students with language and cultural skills. The Admissions, Registrar, Bursar and Financial Aid offices are all located near one another for convenient "one-stop" assistance. In addition, the Child and Family Development Center, which opened in November 2001, provides childcare and family education programs to both the campus community and the community at large.

From its opening with one residence hall in 1965, NHTI has maintained an ongoing commitment to the creation of a welcoming social environment for both commuter and resident students. The Student Affairs staff provides students with many extracurricular activities options: students may participate in any of nearly 30 clubs and student professional organizations; intercollegiate and intramural sports are available, and NHTI's athletic facilities are widely used by the community. Service learning activities provide opportunities for students to reach out to their local community. A new 16,000 square-foot Student Center, opening in September 2005, provides expanded space for student lounges and meeting rooms as well as support services.

From one classroom building and one residence hall, the physical facilities have expanded to include four classroom buildings, three residence halls, the library, the Dr. Goldie Crocker Wellness Center, numerous athletic fields, and the Child and Family Development Center, as well as the administrative offices of the New Hampshire Community Technical College System, the Christa McAuliffe Planetarium, and the New Hampshire Police Standards and Training Academy. The Seekamp Trail, created in 2000 in memory of a long-time chairman of the NHTI Advisory Board, encircles the pond on the south side of the campus; plans are in progress for a new trail on the north side of campus along the Merrimack River that will connect with other area trails. Members of the maintenance staff and indeed all members of the campus community take pride in ensuring that the condition of buildings and grounds enhances the learning environment.

As the student population and the campus continue to grow into the 21st century, the faculty, staff, and administration at NHTI have dedicated themselves to the college's Mission/Values/Vision Statement, revised in June 2001 and re-affirmed in 2005, which expresses the intention of all members of the campus community to "uphold, expand, and improve opportunities for student success." With an eye on its traditions of excellence, New Hampshire Technical Institute is committed to creating a future as distinguished as its past.

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***This catalog is a guide to New Hampshire Technical Institute and does not constitute a contract between NHTI and former, current or future students. Its contents are subject to revision at any time. NHTI reserves the right to change tuition, fees, courses, policies, programs, services, structure, and personnel as required and without notice.***

# ACCREDITATIONS AND MEMBERSHIPS

## Accreditations

**Institutional**

New Hampshire Technical Institute is accredited by the Commission on Institutions of Higher Education of the New England Association of Schools and Colleges, Inc., a nongovernmental, nationally recognized accrediting agency.

Accreditation of an institution by the NEASC, Inc. indicates that it meets or exceeds criteria for the assessment of institutional resources to achieve its stated purpose through appropriate educational programs, is substantially doing so, and gives reasonable evidence that it will continue doing so in the foreseeable future. Institutional integrity is also addressed through accreditation.

Accreditation by the NEASC, Inc. is not partial but applies to the institution as a whole. As such, it is not a guarantee of the quality 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 status of an institution's accreditation by the New England Association should be directed to the administrative staff of the college. Individuals may also contact the Association. Please send inquiries to New England Association of Schools and Colleges, Inc., 209 Burlington Road, Bedford, Massachusetts 01730-1433. The telephone number is (617) 271-0022.

## Specialized Accreditations

**Architectural, Computer, Electronic, Manufacturing and Mechanical Engineering Technologies** - TAC/ABET (Technology Accreditation Commission/Accreditation Board for Engineering and Technology, Inc., 111 Market Place, Suite 1050, Baltimore, MD 21202—Telephone (410) 347-7700)

**Dental Assisting** - Commission on Dental Accreditation of the American Dental Association, full accreditation

**Dental Hygiene** - Commission on Dental Accreditation of the American Dental Association, full accreditation

**Diagnostic Medical Sonography** - Commission on Accreditation of Allied Health Education Programs (CAAHEP) with the Joint Review Committee on Education in Diagnostic Medical Sonography

**Human Service -** Council for Standards in Human Service Education (CSHSE)

**Nursing** - The NHTI Nursing Associate Degree and Practical Nursing programs are approved by the New Hampshire Board of Nursing. The Associate Degree program is also accredited by the National League for Nursing Accrediting Commission (NLNAC) (61 Broadway, NY, NY 10006; telephone 1-800-669-1656, ext.153).

**Paralegal Studies** - Approved by American Bar Association as a legal assistant education program

**Paramedic Emergency Medicine** - Committee on Accreditation on Educational Programs of the Emergency Medical Services Professions (CoAEMSP)

**Radiologic Technology** - Commission on Accreditation of Allied Health Education Programs (CAAHEP) with the Joint Review Committee on Education in Radiologic Technology

## Memberships

New Hampshire Technical Institute is a full institutional member of the American Association of Community Colleges and the League for Innovation. NHTI also has National League for Nursing agency membership in the Council of Associate Degree Programs. Memberships are also held in the New England Association for College Admission Counseling, National Association for College Admission Counseling, New England Board of Higher Education, Institute of Electrical and Electronics Engineers, National Association of Colleges, and American Society for Engineering Education.

***Sweeney Hall***

# MISSION ■ VALUES ■ VISION

## NHTI Mission/Values/Vision Statement

New Hampshire Technical Institute is a public community college serving students, businesses, and the community by providing excellent academic, technical, and professional education.

Believing in the unique value of each individual, we dedicate ourselves to sustaining a progressive and evolving learning community that empowers students, faculty, staff, and alumni to succeed in their personal and professional lives. We therefore commit ourselves to the following:

- Excellence in teaching
- Academic integrity
- Lifelong learning
- Application of current technology
- Appreciation for diversity
- Shared governance
- Mutual respect for students and colleagues
- A welcoming physical and social environment
- Responsiveness to business, industry, and the community

In an environment of ongoing self-evaluation, we will uphold, expand, and improve opportunities for student success by fostering institutional accessibility, supporting student achievement, encouraging innovative teaching, promoting transfer and employment options, and participating in the life of the community.

**WE ARE ALL TEACHERS. WE ARE ALL LEARNERS.**

*Adopted June 2001*
*Re-affirmed Spring 2005*

## Educated Person Statement of Philosophy

Acknowledging that students will not only be workers but also citizens, family members, consumers, and life-long learners in a democratic society, NHTI seeks to foster in its students an understanding of the intellectual, cultural, aesthetic, economic and social dimensions of the world in which they live. While our students learn not only the technical theory and practice which will make them successful in their work, they also learn to analyze those ideas and values which will enable them to participate fully in the culture of their community. With this philosophy as a guide, therefore, NHTI stresses the acquisition of knowledge and skills which will allow students to be successful in a variety of roles: workers, students, community members, leaders, consumers, etc. Therefore, we commit ourselves to the following outcomes which we feel define the educated person:

1. demonstrates the values of integrity, responsibility, perseverance, tolerance of ambiguity, and appreciation for diversity;
2. reads, writes, speaks, and listens on a level that will facilitate the ability to work in a discipline and participate and contribute in a democratic community;
3. demonstrates a process for gathering, evaluating and applying information rationally and consistently to guide moral and ethical behavior;
4. demonstrates an understanding of diverse ideas, emotions and modes of expression, as expressed through literature and the arts;
5. evaluates the effect of historical trends, events, institutions, and social systems on society;
6. recognizes own strengths and weaknesses as a learner, and develops strategies for time management, documentation, evaluation processes, and personal improvement;
7. performs mathematical operations necessary to be competent in both a personal and professional setting;
8. demonstrates scientific thought, both quantitatively and qualitatively, by learning to recognize and formulate questions for analysis of human and technical problems;
9. demonstrates basic applications of computer technology to be competent on both a professional and personal level.

# ADMISSION

## Application Procedures

Applications for admission to New Hampshire Technical Institute are available from the Admissions Office, on-line at www.nhti.edu, or from any New Hampshire high school guidance office.

Admission to NHTI and its academic programs is based on a number of considerations. Waiver of any portion of either general NHTI admission requirements or specific program admission requirements due to special situations may be achieved only through consultation with the head of the specific department and the Director of Admissions.

A $10.00 non-refundable application fee is required. Candidates accepted into degree, diploma and some certificate programs must pay a non-refundable $100.00 tuition deposit within 30 days of acceptance.

The following rules will guide the admission of students to New Hampshire Technical Institute:

1. New Hampshire residents shall be given preference over those not domiciled in the state;
2. Second priority shall be given to students qualifying under the New England Regional Student Program; and
3. Veterans shall be given preference over non-veterans when students of equal academic qualifications are considered.

## General Admission Requirements

1. Be a high school graduate or the equivalent;
2. Submit an application for admission and the $10.00 non-refundable application fee;
3. Have official transcripts forwarded to NHTI by all secondary and postsecondary institutions previously attended;
4. Applicants who have earned a high school equivalency certificate (GED) must submit a copy of the certificate, including scores, as well as transcripts reflecting completed school work and grades prior to leaving school;
5. Perform satisfactorily on any entrance examinations required by the academic program to which admission is desired;
6. Though not required for admission to any program, it is strongly recommended that the scores of one of the standardized national college admission tests (SAT or ACT) be forwarded to the Admissions Office; test scores provide an additional piece of information that expands our knowledge of a student's academic background; because standardized test scores are only one means of evaluating applicants, no specific minimum score is required; (students considering transfer to four-year institutions are especially urged to submit SAT scores since the new institution may require them);
7. Arrange for personal interview if required; and
8. Submit to Health Services such certification of good health by a health care provider as required by a specific program **and** NHTI **before** registering for classes.

**NOTE: IT IS THE APPLICANT'S RESPONSIBILITY** to request that official transcripts of previous study be mailed directly to the ADMISSIONS OFFICE. These transcripts must be received prior to consideration of the application.

Send transcripts to:

New Hampshire Technical Institute
Admissions Office
31 College Drive
Concord, New Hampshire 03301-7412

## Specific Program Requirements

Though each program has specific academic prerequisites, one can meet these prerequisites at NHTI. Students who do not meet the specific admission requirements for their desired program may be offered admission to the Associate in Science in General Studies program. Selected courses are designed to satisfy prerequisite course requirements for a variety of NHTI programs, assuming grades of "C" or better are earned. Depending on their intended major and academic background, students may take, as part of their program, courses such as:

- Introductory English
- Pre-algebra and Algebra
- Introductory Technical Mathematics
- Introductory Biology with Lab
- Introductory Chemistry with Lab
- Pre-Engineering Technology Physics
- Study Strategies

*Please contact the Admissions Office for details.*

**Freshman Assessment**

Students who are entering programs at New Hampshire Technical Institute are required to complete assessment testing before registering for classes. Testing may be waived based on performance on standardized tests and/or grades in specific college courses. Department Heads of academic programs will use testing data to help advise students in course selection. Both national and NHTI data indicate that students benefit from assessment and placement. *Students who need to strengthen skills may need extra time to complete their programs.* For more information, students may contact Admissions at 603-271-7134, the Learning Center at 603-271-7725, or the Department Head of the program in which they are interested or to which they have been admitted.

A student may be eligible to substitute a higher-level course for the course prescribed in the curriculum if indicated by an evaluation of the student's competencies. The substitution can be made only with the joint approval of the student's Department Head and the Department Head of the area offering the course. The approval form is available in the Registrar's Office.

## International Students

In addition to the General Admission Requirements and Specific Admission Requirements for the desired program, international students must submit the following:

1. Official English translation of all secondary school and university academic records;
2. Applicants whose native language is not English must take the Test of English as a Foreign Language (TOEFL) and earn a score of 500 or better (173 or better on the computer-based test); inquiries regarding the test should be addressed to: TOEFL, Educational Testing Service, Box 899, Princeton, NJ 08540, USA; students earning less than 500 on the TOEFL may be evaluated for language study*****;
3. Letter of support from the person(s) who will be financially responsible for the student; letter should include student's name, intent to attend New Hampshire Technical Institute and the amount of money available, must be in English and funds must be stated in US dollars;
4. Letter from the financial institution which holds funds of the person(s) financially responsible for the student; statement should be on official letterhead, indicate the sponsor's and student's names, the amount of money available for the student stated in US dollars and be in English;
5. Copies of current passport and immigration documents including current visa, Duration of Status (D/S) card, I-20, etc.;
6. Health care in the United States is expensive; international students are strongly encouraged to maintain adequate health insurance coverage during their studies. If necessary, policies are available for purchase through NHTI Health Services.

Dollar amounts promised by the sponsor and available in the sponsor's bank account should be sufficient to cover a minimum of one year of expenses (out-of-state tuition, fees, room, board, books and miscellaneous expenses). Before a Certificate of Eligibility for an F-1 visa (I-20) can be issued, applicants must have submitted all documents required to be considered for admission into a program, be accepted into a program and have submitted the required TOEFL score and financial documents.

******Applicants scoring less than 500 on the TOEFL may apply for the General Studies program with an emphasis on ESL training for academic purposes. Each*

*semester NHTI offers at least 9 credits of ESL courses as well as a course in computer applications for ESL students. These courses are designed to help students develop English language skills as well as self-confidence in dealing with challenges in learning, communication, and cultural adjustment in various academic programs at NHTI or other colleges.*

## Readmission

When applying for readmission, students must meet current entrance requirements for the desired program. Upon readmission, students will follow the curriculum published in the current catalogue. However, any common courses will be carried forward and every attempt will be made to make appropriate substitutions when previous courses have been replaced with updated ones. In order to approve a substitution, the Department Head will make a recommendation to the Vice President of Academic Affairs who will make the final decision.

Students who have been declared inactive and wish to return to NHTI must apply for readmission and meet current entrance requirements for the program. *See Inactive Status, pp. 81-82.*

## Academic Amnesty

A student who has previously attended NHTI and is admitted at a later time may be eligible for Academic Amnesty which provides for the following:

1. All grades taken during the student's previous time at the Institute will no longer be used to calculate the student's new cumulative GPA. However, grades C- and above taken during the student's previous time at the Institute will be used to meet course requirements (where appropriate).
2. Even though previous grades will not be used to calculate the new cumulative GPA, all previous grades will remain on the student's transcript.

In order to be eligible for Academic Amnesty a student must meet all of the following conditions:

1. The student has not taken any courses at NHTI for a period of at least 3 years from the last semester of attendance.
2. The student applies for Academic Amnesty at the time of admission.
3. The student has never before received Academic Amnesty.

Please note that Academic Amnesty is designed for students who exhibited poor academic performance during previous attendance. It is not designed for students who achieved a cumulative GPA above 1.7 during previous attendance. Students who are granted academic amnesty should be aware that while previous grades are not used to calculate the new grade point average, they ***will*** be used to evaluate "satisfactory academic progress" for financial aid purposes in accordance with Federal Financial Aid Regulations.

Application for Academic Amnesty may be made by answering the relevant question on the Application for Admission, which is located at the back of this catalog.

## Transfer into NHTI

Students transferring into NHTI must submit transcripts from all previously attended secondary and postsecondary institutions. In order to have college/university courses evaluated for credit applicable to an NHTI degree, transcripts must be submitted in a timely fashion during the admissions process.

New Hampshire Technical Institute accepts credits from other accredited institutions of higher education based on equivalency of course content, equivalency of academic credit hours and when the course was taken. Courses satisfying these criteria are accepted, providing that grades of "C" (based on NHTI standards) or above have been assigned by the issuing institution. The Director of Admissions, in consultation with the Vice President of Academic Affairs and academic departments if necessary, is responsible for determining the appropriateness and acceptance of transfer credits.

Science and other technical courses (e.g., Anatomy and Physiology, computer courses, etc.) taken more than five years ago must either be repeated or challenged. Final decisions will rest with the Department Head.

Students requesting credit from CLEP exams or Advanced Placement exams taken in high school (offered by the College Entrance Examination Board) must present documentation, including score reports, in order to have exams evaluated for transfer credit.

Challenge Exams, Credit by Exam and Pass/Fail courses taken at other institutions will not be accepted for transfer credit into NHTI programs.

When there is doubt about transferability, course descriptions, syllabi and course outlines may be requested.

Transfer credits may be used to satisfy specific degree course requirements. Grades associated with such credits will not be included in the determination of the student's Grade Point Average, which reflects only achievement in courses completed at NHTI.

In the event that a student fails a course at NHTI, subsequently satisfactorily completes a comparable course at another institution and requests transfer, those credits may be used to satisfy NHTI program requirements at the discretion of the program Department Head. However, the grade received at NHTI will remain a part of the transcript, and it will be utilized in determining the student's Grade Point Average (GPA). Only successfully repeating the failed course at NHTI will discount the failing grade from the GPA calculation. *(See Repeated Course policy, p. 82 and Program Residency Requirements policy, p. 82.)*

## Change of Program

Currently enrolled matriculated students may wish to change their program of study. *Details are available on page 79.*

## Collaborative High School Programs

**Project Lead The Way®**

*Project Lead The Way®* is an initiative which allows high school students to explore careers in engineering or engineering technology by completing a designated sequence of courses as part of their high school curriculum. Courses include Introduction to Engineering Design, Digital Electronics, Principles of Engineering and Computer Integrated Manufacturing. Students who have successfully completed any of these courses may be eligible to apply some of the credits to meet requirements in NHTI's Mechanical/Manufacturing Engineering Technology major.

**Project Running Start**

*Project Running Start* offers high school students the opportunity to take challenging college courses while at high school at a reduced tuition rate. Students who successfully complete college courses through *Project Running Start* receive an official transcript from the NH Community Technical College with which the high school is associated. Some examples of courses offered include Psychology, Accounting, Human Biology, Networking, Macroeconomics, Programming with C++, Physics and Supervision. In addition, introductory engineering courses have been available through *Project Lead the Way®* such as Introduction to Engineering Design, Digital Electronics and Principles of Engineering.

## Individual Course Enrollment

Some students may wish to register for individual courses without applying to degree or certificate programs. Most general education and some program-specific courses are open to everyone, assuming course prerequisites are met and space is available after matriculated students have registered. Non-matriculated students, those who have not been formally admitted to a program, must meet the same course requirements and follow the same rules, policies, and procedures of the college as other students.

The content and teaching methods of college courses presume students are adults. Some courses may not be appropriate for students below the age of 18 who do not have a high school diploma or equivalent. Such students are advised to meet with an Admissions or Division of Continuing Education (DCE) Counselor to discuss enrollment prior to registration. Academic departments reserve the right to participate in such discussions. All students are expected to meet course prerequisites.

# TUITION AND FEES

The following table presents a summary of fees established for the 2005-2006 academic year. Tuition and fees are due prior to the beginning of each semester. Some programs require specific uniforms and/or special instruments. Students are responsible for the purchase of these materials.

## Tuition Costs 2005-2006 Academic Year

| | NH Resident | NERSP* | Non-Resident |
|---|---|---|---|
| Tuition Deposit** | $ 100.00 | $ 100.00 | $ 100.00 |
| **Per Credit Cost** | **$ 164.00** | **$ 246.00** | **$ 376.00** |

***Tuition rates are based on per credit hour cost.***

## Fees

■ **Comprehensive Fee*****:**

Day Division: $16.00 per credit hour
Continuing Education Division: $11.00 per credit hour

■ **Academic Instruction Fee:**

An Academic Instruction Fee will be charged for all Laboratory/Clinic/Practicum/Co-op/Internship or other similar experiences. This fee will be calculated by subtracting the number of lecture hours from the number of credit hours and multiplying the remainder by $44.00 for each course. This fee will be added to the normal tuition charge for that course. This fee will be charged to all students with no exceptions. No other lab fees are permitted without the written authorization of the Commissioner of the Department of Community Technical Colleges.

*Example:* *BI 195 A&P I* *(Lecture) 3* *(Lab) 2* *(Credit) 4* *4 - 3 = 1 x 44 = $44*

■ **Clinical Surcharge:** $350.00/per semester

All students enrolled in clinical nursing and dental courses will be charged a $350/per semester clinical surcharge. The following courses carry this charge: DN 113, DN 114, DN 191, DN 196, DN 212, DN 221, NU 115, NU 116, NU 117, NU 215, PN 101, PN 102 and PN 103.

■ **Orientation Fee:** $25.00

■ **Graduation Fee:** $75.00

## Liability Insurance

Personal Professional Liability Insurance is MANDATORY for all students in health and human service related programs which include clinical requirements. Programs include: paramedic emergency medicine, nursing, dental hygiene, dental assisting, radiation therapy, radiologic technology, diagnostic medical sonography, human service, addiction counseling, mental health, and early childhood education. The cost is approximately $20.00 per year. Paramedic Emergency Medicine students pay $65.00 per year. (Note: Liability insurance may be required for students in other programs who participate in an off-campus practicum or internship.)

## Residence Hall Costs

| OCCUPANCY | ROOM | BOARD† | RACT†† | ROOM DEPOSIT††† | TOTAL |
|---|---|---|---|---|---|
| ***Double/Triple*** | | | | | |
| **Fall 2005 Semester** | $ 2025.00 | $ 955.00 | $ 50.00 | $ 50.00 | $ 3080.00 |
| **Spring 2006 Semester** | 2025.00 | 955.00 | 50.00 | .00 | 3030.00 |
| ***Total*** | ***$ 4050.00*** | ***$ 1910.00*** | ***$ 100.00*** | ***$ 50.00*** | ***$ 6110.00*** |
| ***Single*** | | | | | |
| **Fall 2005 Semester** | $ 2415.00 | $ 955.00 | $ 50.00 | $ 50.00 | $ 3470.00 |
| **Spring 2006 Semester** | 2415.00 | 955.00 | 50.00 | .00 | 3420.00 |
| ***Total*** | ***$ 4830 .00*** | ***$ 1910.00*** | ***$ 100.00*** | ***$ 50.00*** | ***$ 6890.00*** |

**CHARGES ARE SUBJECT TO CHANGE WITHOUT NOTICE.**

* New England Regional Student Program
** Non-Refundable: will be credited toward first semester tuition
*** Supports the Wellness Center, Student Center and student activities *(see NHTI catalog or the NHTI Student Handbook for further information)*

† 19 meal plan; 14 meal plan available for $910/semester
†† Resident Activity Fee
††† Non-refundable: will be credited to any residence hall damages

# PAYMENT AND REFUND POLICIES

## Payment of Tuition and Fees

Tuition and fees are due prior to the beginning of each semester. Late fees apply to those who fail to make payment arrangements prior to the beginning of each semester. Students with outstanding balances on their accounts will not be permitted to enroll in future semesters or receive grade transcripts until prior term balances have been paid.

Course schedules for the next semester will not be available until financial arrangements have been made with the Bursar's Office. After financial obligations have been met, students may register for classes, then obtain their schedule from the Student Information System. Program cost estimates by academic program are available on the NHTI website at www.nhti.edu/bursar/.

### Collection Clause

Students will be required to sign the following statement when completing a variety of NHTI forms, including Registration Forms, Add/Drop Forms, Deferred Payment Agreement Forms, Financial Aid Deferment/Award Forms, Withdrawal Forms and On-line Registration Forms:

> "I understand by registering for courses at NHTI, I am financially obligated for ALL costs related to the registered course(s). Upon a drop or withdrawal, I understand that I will be responsible for all charges as noted in the student catalog and handbook. I further understand that if I do not make payment in full, my account may be reported to the credit bureau and/or turned over to an outside collection agency. I also understand that I will be responsible for the costs of the outside collection agency, any legal fees, and any bounced check fees under RSA 6:11, which will add significant costs to my account balance."

### NHTI Tuition Payment Options: Full Payment and Payment Plan

NHTI offers a FACTS/e-Cashier Payment Plan to students. With FACTS/e-Cashier, students can now make monthly payments for their tuition/fees automatically. It's easy to enroll and less expensive than getting a loan. Visit us on the web at www.nhti.edu and click on the e-Cashier button to access FACTS/e-Cashier. The FACTS plan electronically processes the monthly payments using the responsible party's bank account or credit card so there is no check writing or stamps involved. Students also have the option to make full payment using FACTS/e-Cashier. Details about this program are mailed to all new students and can also be obtained by calling the Bursar's Office at (603) 271-6309. For assistance when enrolling on-line for the payment plan, contact the FACTS Management Company at 800-609-8056.

## Third Party Payments

In order for NHTI to invoice a student's company directly for courses taken, the following conditions are required:

1. A letter of authorization to bill the company must be presented at time of registration. The letter must be on company letterhead and the billing address should be indicated. Responsibility for payment must be indicated, regardless of grade or course completion. A separate letter is needed for each semester.
2. If the student's company fails to pay the invoice, the student is responsible for the bill and will not be eligible to register for any future courses until the bill is paid in full.
3. If a student's company offers a reimbursement program, the student is responsible for tuition. NHTI does not offer deferred payment. Students choosing to use the NHTI internal payment plan are responsible for making payments according to the due dates.

## Delinquent Account Collection Policy

Any account ninety days past due may be turned over to an independent, outside collections agency. This will add at least twenty-eight percent, the agency's fee, to the total owed. At the same time the debt will more than likely be reported to the Credit Bureau. Students will not be eligible to receive official transcripts or register for courses at NHTI.

After all financial obligations have been satisfied, students who wish to return to NHTI will be required to prepay in full for one semester at the time of registration. Students will only be able to defer payments when all financial aid requirements have been satisfied. Any remaining balance must be paid in full. After one semester, the student will be in good standing with NHTI. The student will then become eligible for the NHTI Payment Plan and Financial Aid Deferment using all awards except college work-study.

## NHTI Refund Policy

*Please note that all refunds described below require that the student complete an official withdrawal form in the Registrar's Office. Therefore, students who register for classes, never attend and do not officially withdraw are liable for all charges.*

Students who complete the official college/institute withdrawal procedure prior to the first meeting of the class in the second week of the semester (or other pro-rated enrollment period) will receive a 100% refund of tuition, less non-refundable fees. Non-refundable fees are defined as advance tuition deposits, admission application fees, residence hall room deposits, payment plan fee, late registration fee and orientation fees. All other fees are to be considered refundable. This includes, but is not limited to lab fees, comprehensive student services fees and the Nursing and Dental Program clinical surcharge.

Students who drop a course or courses prior to the first meeting of the class in the second week of the semester (or other pro-rated enrollment period) will be refunded 100%. *Students who neglect to officially drop within the drop/add period are not eligible for a refund.*

Students registered for workshops through Continuing Education or the Center for Training and Business Development must withdraw in writing at least three days prior to the first workshop session in order to receive a full refund of tuition and fees.

In extenuating circumstances, the President (or designee) is authorized to offer alternative compensation in the form of tuition credit or waiver to students on a case-by-case basis. Tuition credit on a student account must be used within one calendar year from the date of authorization.

**Residence Hall refunds** - A student may request a release from their contract and a refund, by writing to the Director of Residence Life. Room refunds will be prorated for the remainder of the semester and an Administrative Release Fee of $300.00 will be charged. If the balance due for the remainder of the semester is less than the Administrative Release Fee, then the balance will be kept in lieu of the fee.

**Board refunds** may be pro-rated for the remainder of the semester when a resident student officially withdraws from Residence Life, or NHTI. Such prorated refunds will be computed on a weekly basis from the first day of the week following withdrawal.

## New Hampshire Residency Status

In order to qualify for New Hampshire resident tuition rates, a student must have been a legal resident of the state for a minimum of twelve consecutive months immediately preceding the student's NHTI enrollment date (first day of classes). "Legal domicile," as stated on the last page of the Application for Admission, refers to place of primary residence, either with parents or as an independent.

Students who change legal residence to New Hampshire during their studies at NHTI must still be legally domiciled in this state for twelve months prior to being eligible for resident rates. Change of address does

not necessarily constitute change of legal residence. In order to begin the process of eligibility, students must provide the Admissions Office with proof of residency, such as a notarized statement or rent receipts, that accurately reflects the effective date of residency. A New Hampshire driver's license is not sufficient proof.

## New England Regional Student Program (NERSP)

The New England Regional Student Program enables a resident of a New England state to enroll in a public college or university in the six state region at 50% above in-state tuition for certain degree programs if:

1. The program is not available in the home-state public college;
2. The out-of-state, public institution is nearer to the student's residence than the in-state institution that offers a similar certificate, diploma or associate degree program.

Students eligible for NERSP should submit a written request to the Director of Admissions when they apply to NHTI. NHTI considers New England Regional status to be a form of financial aid. For further information, contact a high school guidance counselor or NHTI Admissions Office.

## Veterans Administration Enrollment Certification

Students interested in and eligible for VA education benefits should contact the Registrar *(also see page 14).*

## Books and Supplies

Students are responsible for the purchase of all books and supplies required for the courses in which they are enrolled. The estimated cost of these books and supplies varies depending on the academic program. For example, students in health-related programs are responsible for purchasing uniforms.

NHTI Bookstore personnel can provide estimates for the cost of books for a given major. Students should contact their Department directly for the estimated cost of additional supplies and instruments.

## Protested Check Policy

"Whenever any check, draft or money order issued in payment of any fee or for any other purpose is returned to any state department or institution as uncollectible, the department or institution may charge a fee of $25.00 or 5% of the face amount of the check, whichever is the greater, plus all protest and bank fees, in addition to the amount of the check, draft or money order to the person presenting the check, draft or money order to the department or institution to cover the costs of collection." (RSA 6:11-a)

## NHTI Emergency Loans

| Program | Loan Name |
|---|---|
| All programs | Dr. Paul Lieberman Book Loan |
| All programs | Lakes Region Scholarship Fund |
| Criminal Justice | Brandon Davis Memorial |
| Dental | Dr. Erwin Adams/ Robert Whittaker Memorial |
| Electronic Engineering Technology | Randy Pierce Fund |
| Human Services | Sandra Fernie Memorial |
| Nursing | Mary Dryer Memorial |
| Nursing | Suestia Robinson Memorial |
| Paramedic Emergency Medicine | Chuck Beede Memorial |

For further information, please contact the Counseling Office in the Student Affairs Office at (603) 271-6983 or the Bursar's Office at (603) 271-6311.

# FINANCIAL AID

## What is Student Financial Aid (SFA)?

1. SFA is assistance for students matriculated (formally accepted) in a financial aid-eligible program (16 credits or more).
2. Students not planning to enroll at least half-time (6 credits) should check with the Financial Aid Office to determine eligibility.
3. Eligibility for financial aid is based on the number of credits a student is enrolled in for a particular semester.
4. It helps to cover educational expenses, including tuition and fees, room and board, books and supplies, and transportation.

Most aid is need-based, and the four types of aid are grants, loans, Federal Work-Study and scholarships. Information and application materials for these programs are available from the Financial Aid Office at (603) 271-7135 or from the website at www.nhti.edu.

In addition to these sources, Financial Aid is sometimes available in the student's hometown. Local agencies often provide low cost loans or scholarships. Listings of such sources are available through high school guidance counselors. New Hampshire Higher Education Assistance Foundation (NHHEAF) has information on other financial resources. NHHEAF can be reached at 1-800-525-2577.

NHTI's priority deadline is May 1 for the receipt of the following: electronic receipt of the Free Application for Federal Student Aid (FAFSA), NHTI application for financial aid and appropriate tax returns. *Students must also be matriculated (formally accepted) into an eligible degree, certificate or diploma program (16 credits or more).*

The Financial Aid Office encourages all students who are interested in receiving aid to apply for admission to NHTI before January 1 to assure timely processing of financial aid awards.

Federal regulations and NHTI policy require that students continue satisfactory academic progress and remain in good academic standing to receive federal or state financial aid.

## Process to Apply for Financial Aid:

- Complete a hardcopy or electronic version of the Free Application for Federal Student Aid (FAFSA);
- Review the Student Aid Report (SAR) for accuracy; this will be mailed or e-mailed to students one to four weeks after submitting the FAFSA;
- Contact the Financial Aid Office, if needed, for further assistance.

## Federal Student Aid (Title IV)

- Federal Pell Grant is a form of financial aid that does not have to be repaid.
- Federal Supplemental Educational Opportunity Grant (SEOG) is a form of financial aid that does not have to be repaid.
- Federal Work-Study money is for educational expenses and is paid by the school for on-campus or community-based work. Students receive pay checks as work is completed.
- Federal Perkins Loan is a low interest loan available to NHTI students who demonstrate financial need.
- Federal Family Education Loans (FFEL) are low interest loans and include Federal Subsidized Stafford Loans, Federal Unsubsidized Stafford Loans and Federal Parent Loans (PLUS).

**Return of Federal Title IV Funds**

***As mandated by law, students who withdraw from school before the 60% point in a semester will have to repay a portion or all of their aid (see pages 14 & 16).***

## Additional Grants, Loans and Scholarships

***All scholarships are awarded based on available funds.***

*** Awards are used to defray college expenses at NHTI**

**# Awarded at NHTI's Awards Day Ceremony**

**Agnes M. Lindsay Trust Scholarship**

This scholarship is for students with financial need who are residents of towns with fewer than 5,000 inhabitants in New Hampshire, Vermont, Massachusetts or Maine.

**Alice M. Yarnold & Samuel Yarnold Scholarship Trust ($2,000-$5,000):**

- New Hampshire residents;
- demonstrate financial need and scholastic excellence;
- pursuing a degree in nursing, medicine or social work;
- applications must be submitted by April 15th.

**American Dental Hygiene Association:**

- must be a full-time Dental Hygiene student with freshman year completed;
- must have completed Free Application for Federal Student Aid (FAFSA);
- applications must be submitted by June 1st;
- www.adha.org.

**Barry M. Goldwater Scholarship (up to $7500 each year for two years)**

This is a very competitive, nationwide scholarship specifically targeting students who are pursuing careers in mathematics, natural sciences, engineering or computer science. NHTI selects two nominees to formally apply for the scholarship. The application deadline is in early February.

Criteria include:

- be a current NHTI student who is planning at least two more years of full-time undergraduate study (can include students who will be graduating in May and transferring to 4-year institution);
- have a minimum 3.0 GPA and be in upper fourth of the class;
- be a U.S. citizen or legal permanent resident.

**#Beverly Grappone Scholarship**

Criteria include:

- be a nursing student;
- be a senior student raising a family;
- possess excellent nursing skills and demonstrate compassion.

***Brenda Downing Memorial**

This award was established in memory of Brenda Downing by her family. Brenda was a faculty member in the Diagnostic Medical Sonography Program at New Hampshire Technical Institute. This is awarded to a graduating senior who exemplifies the qualities that Brenda exhibited.

**Chester W. French Scholarship**

The Chester W. French Scholarship Program offers a scholarship for incoming freshman who have recently graduated from John Stark Regional High School and are accepted into any of the engineering technology programs at NHTI. Priority is given to students who have successfully completed a Project Lead the Way course.

**Coca-Cola Two-Year Colleges Scholarship (up to $1000)**

This is a nationwide scholarship that targets students who have completed a substantial amount of community service. NHTI selects two nominees to formally apply for the scholarship. The application deadline is usually in March. Criteria include:

- be a current NHTI student planning to enroll in at least two courses at NHTI during the next semester;
- have a minimum 2.5 GPA;
- have completed and documented substantial community service hours within the previous 12 months;
- be a U.S. citizen or legal permanent resident;
- may not be a son or daughter of a Coca-Cola employee.

**Concord Business & Professional Women's Club:**

- student must be a female taking business courses and interested in entering the business field;
- applications must be submitted by April 30th to the Concord Business and Professional Women's Association.

**Concord Dental Society**

This grant is awarded to students who are enrolled in Dental Hygiene or Dental Assisting at NHTI. The grant is repaid by rendering twelve months of service to an office that is a member of the Concord Dental Society; otherwise, the grant becomes a loan, which must be repaid.

**Dr. Peter Atwood Memorial**

This award was established in the memory of Peter Atwood by his family. The award will benefit students in the Radiologic Technology Program at New Hampshire Technical Institute.

***#Earl H. Little Scholarship Award**

This award was established in the memory of Earl H. Little by his family. A pioneer for vocational/technical education in the State of New Hampshire, Mr. Little is considered to be one of the founders of New Hampshire Technical Institute and its engineering technology programs. This scholarship is awarded annually to a full-time engineering technology freshman with the highest grade point average.

**Early Childhood Education Scholarship Program**

NH Community Technical Colleges partner with the NH Department of Health & Human Services to offer tuition assistance to child care providers who are entering or are currently in the field of Early Care and Education. If you provide family child care, or work at least part time in a child care setting in New Hampshire, you may be eligible to receive tuition assistance for Early Childhood Education courses offered through the NHCTC. Additional information may be accessed at http://www.nhctc.edu/foundation/ecedescription.htm.

***Edward C. Sweeney, Jr. Scholarship:**

- student with a visible and permanent walking disability;
- must be a NH resident who graduated from a NH high school;
- award will be used to defray tuition expenses.

***Electronic Engineering Technology/Computer Engineering Technology Scholarship**

This award was established on behalf of a former Electronic and Computer Engineering Technology faculty member at New Hampshire Technical Institute. It is awarded yearly to one outstanding student in each program.

***Governor's Success Grant**

Awards are based on merit and financial need as determined by the results of the Free Application for Federal Student Aid (FAFSA). The Governor's Success Grant is awarded, based on the availability of funds, to students who meet the following criteria:

- New Hampshire residents;
- minimum 2.5 GPA;
- must have completed freshman year;
- enrolled full-time for the upcoming fall semester.

**Jack Kent Cooke Foundation Scholarship (up to $30,000)**

This is a very competitive, nationwide scholarship specifically targeting students who will be transferring to four-year institutions. NHTI selects two nominees to formally apply for the scholarship. The application deadline is in early February. Criteria include:

- have completed freshman credits by December;
- have a cumulative GPA of 3.5 or higher;
- be transferring to an accredited 4-year institution in the coming fall semester;
- selections will be made by the Cooke Scholarship Board based on the above and
  - academic achievement and intelligence;
  - financial need;
  - leadership and public service;
  - potential to make a significant contribution to applicant's field of study and/or society;
  - appreciation for/participation in the arts and humanities.

***#Kara Philbrick Memorial Scholarship ($500):**

- female student;
- exceptional attitude and work ethic;
- desire and ability to succeed;
- completed one year of study;
- preference given to students in the Travel and Tourism program.

***#Marshall Snyder Memorial Fund**

This award was established in the memory of Marshall Snyder by his family. Marshall taught chemistry, materials science and physics at New Hampshire Technical Institute from 1965-1984. It is the wish of the family to honor the type of student Marshall enjoyed the most-a student who performed well in the laboratory sessions of courses. This scholarship is open to any NHTI student who meets the following criteria:

- is currently a full-time student or is following a three-year program;
- has taken, or is taking a credit-bearing physical science class that has a laboratory component. Physical science courses include chemistry and physics;
- maintains a GPA of 2.5.

***Men and Women in Non-Traditional Programs Grant**

This grant is awarded to men and women who are matriculated in programs determined to be non-traditional for their gender. Categories currently identified include women in Engineering Technologies, Computer Information Systems and Paramedic Emergency Medicine, and men in Nursing, Dental Hygiene, Diagnostic Medical Sonography, Radiologic Technology and Radiation Therapy. Applications are available each semester in the Financial Aid Office.

**NASA/PSNH Scholarship**

Available to full-time students enrolled in an associate degree program in science, mathematics, engineering, or technology with a demonstrated interest in pursuing further education or a career in fields of interest to NASA and PSNH. Underserved and nontraditional students, including women, minorities, and persons with disabilities, are encouraged to apply.

**National Society of Accountants:**

- accounting majors who attend full-time days or part-time evenings;
- maintain a GPA of 3.0;
- applications must be submitted by the March 1st deadline;
- www.nsacct.org.

**New Hampshire Chapter of American College of Radiology Scholarship**

Three scholarships are awarded annually to deserving 2nd year Radiologic Technology students.

Criteria include:

- New Hampshire residents;
- financial need;
- recommendations from clinical supervisor and program director;
- applications must be submitted by March 5th.

**New Hampshire Charitable Fund ($100 - $2,500)**

New Hampshire residents pursuing undergraduate or graduate study at approved institutions of postsecondary education are eligible to apply for grants, interest-free and low interest loans from this fund. Information, applications and deadlines are available from the New Hampshire Charitable Foundation Student Aid Program, 37 Pleasant Street, Concord, NH 03301; phone: 603-225-6641 or 1-800-464-1700; website is http://www.nhcf.org/.

***New Hampshire Community Technical College System Flexible Loan Funds for Students with Disabilities**

Students must complete an application and submit it to the Disabilities Coordinator at NHTI. Flexible funds may be used for one or a combination of the following purposes: education, transportation, housing, external supports (e.g., external testing), assistive technology, physical needs, tutoring, and books. Criteria include:

- have a documented disability or have completed a disability screening with the Coordinator of Disabilities Services resulting in a recommendation and referral for diagnostic test ing;
- complete a Free Application for Federal Student Aid (FAFSA).
- if applicable, have accessed funds through Regional Vocational Rehabilitation, Veterans' Administration, Developmental Disabilities, Division of Mental Health and Developmental Services, and/or any other State or Federal Agency involved with providing financial and/or technical supports; and
- can demonstrate, through documents, that all other financial resources available have been thoroughly explored.

**NHCTC Foundation Employee-Sponsored Scholarship for Non-Traditional Students**

The employees of the New Hampshire Community Technical Colleges convene annually in Concord (Symposium) for a day of professional development workshops. A special feature of this day comes from the staff and faculty who donate items for a raffle. Often these items are crafts and hobbies made by the employee. Proceeds from the raffle are presented to the NHCTC Foundation to fund annual scholarships for deserving students.

The NHCTC Employee-Sponsored Scholarship will offer financial assistance to students who are returning to college after being out of school for more than five years. The student must be matriculated at any NHCTC campus and have completed 12 college credit hours within the NHCTC System with a GPA of 2.5 or better. The student must be a NH resident and can be enrolled either part-time or full-time. The number of NHCTC Employee-Sponsored Scholarships awarded is based on the amount of funds raised. The scholarship amount is $300, awarded in the fall of each year.

Interested students should contact Lisa Danley, Foundation Director, at (603) 271-6783 for an application (or 1-800-247-3420, X6783). The application deadline is August 1 of each year.

**New Hampshire National Guard Tuition Waiver Program**

Qualified students will meet the following criteria:

- admitted to a degree program;
- must have completed the Free Application for Federal Student Aid (FAFSA);
- completion of Advanced Individual Training or commissioning;
- active member of the New Hampshire National Guard.

Interested students should contact their National Guard education services officer and the NHTI Admissions Office for more information.

**New Hampshire Society of Professional Engineers**

- New Hampshire residents;
- currently enrolled in an engineering or engineering technology program;
- 3.0 GPA or higher;
- applications are available at http://www.nhspe.org;
- applications must be submitted by April 15th.

***New Hampshire Valedictorian Scholarship**

This is a two-year full tuition and fees scholarship offered to any Valedictorian graduating from a New Hampshire public or private high school in the current academic year. Students must be accepted to and plan to attend New Hampshire Technical Institute following high school graduation.

**Northeast Delta Dental Foundation, Inc. Scholarship**

This scholarship is awarded to students who are New Hampshire residents enrolled in Dental Hygiene or Dental Assisting at NHTI. Awards are based on financial need as determined by the results of the Free Application for Federal Student Aid (FAFSA).

**Orphans of Veterans Scholarship**

Eligible applicants are those individuals who: are children of parents who served on active duty in the armed services of the United States; *and* are legal residents of New Hampshire; *and* whose parents died on active duty *or* have since died from a service-connected disability. This scholarship provides full tuition at a New Hampshire public college/university and $2500 towards board, books and supplies. For more information contact the Postsecondary Education Commission at (603) 271-2555.

**Phi Theta Kappa**

Phi Theta Kappa has recognized academic excellence in the two-year colleges since 1918 and has become the largest and the most prestigious honor society serving two-year colleges around the world. If you would like more information about joining and the scholarship opportunities that are available, log on to www.PTK.org. For information on NHTI's chapter contact Judy King at (603) 271-8884.

**POW/MIA Children's Benefits**

Children of persons domiciled in New Hampshire while serving in the U.S. Armed Forces after February 28, 1961, and officially interred or missing in action during the Southeast Asian conflict, are eligible to receive full tuition. Information may be obtained from a high school guidance counselor or the State Board of Education, Concord, NH 03301.

***Sewell Memorial Career Award ($1,000)**

Criteria include:

- be a dependent of a Maytag Corporation employee;
- be a high school senior during the current academic year;
- be enrolled for a minimum of twelve credits;
- maintain GPA of 2.5;
- additional requirements written on application form;
- applications must be postmarked April 15th of the current academic year.

**Society of Manufacturing Engineers Scholarship ($1,000 - $2,500)**

Criteria include:

- be currently enrolled for 12 or more credits;
- have completed 30 credit hours in the Manufacturing Engineering Technology program;
- have a minimum cumulative GPA of 3.5;
- additional information posted in Engineering Technology area in Little Hall;
- application cover sheet available in the Financial Aid Office;
- www.sme.org.

***# Senate Award (Freshmen ($1000))**

The Student Senate annually awards four Student Senate Awards to returning freshmen to be used for tuition for the next academic year.

**Senate Awards (Seniors ($1000))**

The Student Senate annually awards two Student Senate Awards to graduating seniors.

***Technical Education Loan Fund**

The Technical Education Loan Fund is a loan at 5% interest and is awarded to students who demonstrate a high level of need as determined by the Financial Aid staff.

***Transition Program**

The Transition Program is a federally funded program which provides assistance to individuals in transition such as single pregnant women, single parents, displaced homemakers, individuals with documented disabilities, and individuals with limited English proficiency. Financial assistance is available to help with tuition, books and other educational expenses. In addition to financial support, the program offers counseling and personal support. To participate in the program, students must:

- be formally accepted into an academic program;
- plan to enroll for at least six credits;
- apply for and be eligible for financial aid;
- complete a Transition Program application by the established deadline.

The Office of Student Affairs administers this program. Applications are available from the Student Affairs Office, the Financial Aid Office, the English as a Second Language (ESL) Tutor, and the Disabilities Coordinator.

**Veterans' Assistance**

NHTI is approved for veterans' benefits under the Veterans Adjustment Act (GI Bill), the Veterans Educational Assistance Program (VEAP), the Montgomery GI Bill and Dependents Educational Assistance Program. Qualified enrolled veterans and their dependents may receive monthly financial benefits as full or part-time students. Applications and information on the program are available from the NHTI Registrar (VA Certifying Officer). Additional information is available at *http://www.GIBILL.va.gov.*

**Workforce Incentive Program**

This is a state and private grant awarded to nursing students who are NH residents and who show an unmet need based on the Free Application for Federal Student Aid (FAFSA). The grant is repaid by rendering nursing service in New Hampshire. Otherwise, the grant becomes a loan, which must be repaid.

**#Zonta Club of Concord in memory of Eleanor Provencher**

Zonta International is a world wide service organization of executives in business and the professions working together to advance the status of women.

Criteria include:

- female student;
- must be out of high school for 5 years;
- must have completed 12 college credit hours prior to being admitted into a degree program at NHTI;
- 2.5 GPA.

## Financial Aid Return of Funds

**Return of Federal Title IV Funds: Mandated by Law**

*Students who withdraw from school before the 60% point in a semester will have to repay a portion or all of their Federal Pell Grant, Federal SEOG grant, and Federal Perkins Loan funds to the United States Department of Education.* In terms of Federal Family Education Loans (Stafford student loans) the unearned portion of the loan money will be returned to the student's lender.

The exact amount required to be returned will vary depending on the amount of grant and loan money the student received and at what point in time the student withdraws from the College.

In addition, the student will be liable for the balance owed the College for tuition, fees and if applicable, room and board. The student will receive a revised statement of account for the expenses incurred, which will include the reduction and or loss of Federal Title IV funds.

***Note***: Federal Stafford Loans (FFELP). If a student is in the first year of an undergraduate program, is a first-time borrower under the FFEL Program (Stafford Loan), and withdraws from the college prior to 30 days into the term, the student becomes ***ineligible*** for the Stafford Loan.

Students who choose to withdraw from the College must complete an official Withdrawal Form. This form must be signed and returned to the Registrar's office.

## Standards of Satisfactory Progress (SP)

The Higher Education Act (HEA) and the Community Technical Colleges require that students maintain satisfactory academic progress in the course of study they are pursuing in order to receive financial aid under Title IV of the HEA. These programs include the Federal Pell Grant, Federal Perkins Loan, Federal Work Study, Federal Supplemental Educational Opportunity Grant, Federal Subsidized and Unsubsidized Stafford Loans, Federal PLUS and the State Student Incentive Grant

program. **Satisfactory progress is based on standards of quality and quantity.**

## Enrollment Periods

When a student is reviewed for satisfactory progress, all enrollment periods for the current program are included in the review. This includes enrollment periods during which the student *did not* receive financial aid and enrollment periods during which the student *did* receive financial aid.

## Qualitative Standards

Quality is indicated in grades received, as defined in the cumulative Grade Point Average (GPA). Successful completion of courses includes the following grades: A, B, C, D and P. New Hampshire Technical Institute will follow these guidelines:

| Total Credits Accumulated Toward NHTI Program* | Minimum Cumulative Grade Point Average Required |
|---|---|
| 1 - 13 | 1.5 |
| 14 - 27 | 1.7 |
| 28 - 40 | 1.8 |
| 41+ | 2.0 |

*Total credits accumulated will include:

1. all courses used in computing GPA for current program;
2. pass/fail courses in current program.

The financial aid officer reviews qualitative satisfactory progress at the end of each semester.

Students suspended by the Academic Standards Committee may not be eligible for any Title IV funds even though the students may be encouraged to enroll for courses during the suspension period. If students apply for and are accepted to another academic program following suspension, their eligibility for financial aid may be reviewed. Contact the Financial Aid Office at 603-271-7135 to determine eligibility.

## Qualitative Warning and Ineligibility

Students who fail to meet the qualitative standards for satisfactory progress will be placed on satisfactory progress warning for one semester. During this semester they will continue to be eligible for financial aid, but must bring their cumulative grade point average up to the required standard. If a student does not bring his/her GPA to the required standard during the warning semester, the student will be ineligible to receive financial aid for the following semester. Aid can be reinstated only after a student has met the required standards listed above. Withdrawal and readmission do not necessarily change the student's satisfactory progress status.

## Quantitative Standards

**Associate Degree, Certificate and Diploma Programs**

Students pursuing financial aid-eligible programs must complete a minimum number of credits each year to conform with satisfactory progress. Completed credits result in grades of A, B, C, D, E, P or PP. Grades of W, I, WP, NP, F, AF, AD or AU do not fulfill the requirement.

*Credit hours attempted will be cumulative and will include all hours for which the student was enrolled as of the end of the ADD/DROP period half-way through the program. For full-time and part-time students, the formula to determine the minimum number of credits required is as follows:*

- # of credits in the program of study x 150% = maximum # of credits student is allowed to attempt and receive aid

- # of credits in program of study divided by maximum # of credits student is allowed to attempt and receive financial aid = the percentage of credits attempted that student must complete

- # of credits student attempted = # of credits student must complete.

**Example:**

72 credits in program x 150% = 108

$\frac{72}{108}$ = 67%

If student attempted 30 credits: 30 x 67% = 20 credits which student must complete that year

**Certificate/Diploma Programs:**

Same as Associate Degree except that quantitative satisfactory progress is reviewed at the end of each semester. Therefore, step 3 is:

# of credits students attempted during **semester** x 67% = # of credits student must complete that **semester**.

## Quantitative Warning and Ineligibility

Students enrolled in Associate Degree, Certificate or Diploma programs who fail to meet the quantitative standards for satisfactory progress will be placed on satisfactory progress warning for **one semester**. During this warning semester, students will continue to be eligible for financial aid, but must bring their cumulative number of credits earned to the required standard. (Transfer credits can be used to make up deficiencies in credits earned.) If during the semester of warning the student does not bring up the cumulative number of credits earned to the required standard, the student will be ineligible for financial aid the following semester. Aid can be reinstated only after a student has met the required standards listed above. Withdrawal and readmission do not necessarily change the student's satisfactory progress status.

## Appeal Procedure

If a student is ineligible for Financial Aid based on satisfactory progress, the student may appeal for review of that determination. Students claiming extenuating circumstances should first appeal in writing to the Financial Aid Officer. The next appeal should be made in writing to the Associate Vice President for Enrollment Management within 15 working days following the Financial Aid Officer's decision. A successful appeal may preserve the student's eligibility for financial aid in the following semester.

## Regaining Eligibility

Students who are denied financial aid for failure to maintain satisfactory progress must regain their eligibility during future semesters at their own expense. When GPAs are raised to the acceptable level, students may be eligible for reinstatement of financial aid providing they are also within the quantitative satisfactory progress limits.

Suspended students who are readmitted to a program may not be eligible for financial aid on their return unless they have taken courses in the interim and raised their GPA to satisfy the qualitative and quantita-

tive requirements. Otherwise, they must complete future semesters at their own expense until they regain eligibility for Title IV funds.

## Academic Amnesty

Students who are granted academic amnesty should be aware that previous grades will be used to evaluate Satisfactory Progress (Quantitative and Qualitative) for financial aid purposes even though they are not included in the new academic grade point average.

## Audit a Course

Financial Aid does not cover any courses a student audits.

## Change of Program

Students who change majors will be given additional time to complete requirements based on the number of credits transferred into the new program.

## Consortium Agreements

Consortium Agreements are counted as transfer credits. The student needs to comply with the Satisfactory Progress rules of the Home College (college at which the student receives financial aid). Credits received via Consortium Agreements count toward the maximum time frame (Quantitative), but *do not* count in qualitative measure (GPA).

## Course Withdrawal

Course withdrawal may affect a student's eligibility for financial aid.

## Credit by Examination

Financial Aid does not cover courses in which a student earns credit through Credit by Examination. Credit by Examinations count toward the maximum time frame (quantitative) but do not count in qualitative measure (GPA). If a student earns credit by examination, the enrollment status could change, an action which could affect financial aid status.

## Developmental/Remedial Courses

These courses are not counted toward graduation requirements but are counted in a student's GPA. Financial Aid uses these credits in calculating Qualitative Standard (GPA) but not in maximum time frame (Quantitative).

## Experiential Learning Credits

Financial Aid does not cover courses in which a student earns credit through Experiential Learning. Experiential Learning Credits count toward the maximum time frame (quantitative) but *do not* count in qualitative measure (GPA).

## Incomplete Grades (Financial Aid Recipients)

In most cases, financial aid will be withheld until final grades are in. If financial aid is disbursed and the final grades result in a GPA that makes the student ineligible for financial assistance, any Title IV monies received for that ineligible semester must be repaid by the student.

## Institute Withdrawal (Financial Aid Recipients)

Financial Aid recipients who withdraw from all classes after a semester has begun will have a percentage of their financial aid funds returned to the financial aid (Title IV) programs. If the student withdraws after the 60% point in the semester (please see date in the Academic Calendar), *all of his/her Title IV funds are considered earned.*

## No Pass Grades (Return of Title IV Funds)

Students in the following situation in a given semester will have the unearned portion of that semester's financial aid returned to the federal government:

- are receiving Financial aid; ***and***
- *all grades* issued for a given semester are a combination of "no passing grades"; ***and***
- do not have a last date of attendance documented after the 60% period of the semester .

The Return of Title IV calculation will use the "last date of attendance" *or* the 50% period of that semester. Students in this situation may be *required to repay* a percentage of their financial aid.

## Repeated Courses

Financial Aid will cover a repeated course only when it is retaken to replace an unacceptable grade as determined by specific course and/or major.

## Transfer Credits

Transfer credits count toward the maximum time frame (Quantitative), but *do not* count in qualitative measure (GPA).

*The following curricula are for students entering programs in 2005-06.*

# PROGRAMS OF STUDY

**Note:**

1. Refer to individual program pages for specific Admission requirements.
2. Number sequencing in the columns to the right of the course name means the following:

**CL Column (first digit)**
Numbers in the CL column designate the number of lecture/classroom hours per week for the course.

**LAB Column (second digit)**
Numbers in the LAB column designate the number of simulation laboratory, laboratory or clinical hours per week for the course.

**CR Column (third digit)**
Numbers in the CR column designate the number of credit hours for the course.

# BUSINESS PROGRAMS

## Business Administration

The Business Administration program is designed to prepare students for the day-to-day challenges in the dynamic field of business. The program offers a broad background for students who seek careers in business. The associate degree curriculum includes courses in accounting, business law, management, word processing and spreadsheets, economics, English, mathematics and applied behavioral sciences.

Having studied contemporary management practices, graduates of the program are prepared to enter training positions in supervision, marketing management or office management. Other graduates will transfer to four-year colleges. The degree of Associate in Science with a major in Business Administration will be awarded upon successful completion of all program requirements.

NHTI has transfer affiliations with four year institutions including:

- Daniel Webster College
- Franklin Pierce College
- Plymouth State University
- Southern New Hampshire University
- Rivier College

Students have also transferred to:

- Babson College
- Bryant College
- Bentley College

The Department of Business Administration is a member of the Association of Collegiate Business Schools and Programs (ACBSP).

### NHTI Alumni Profile

**Tom Henley**
Class of 2003
**Major:** Management

Tom graduated from Kearsarge Regional High School and enrolled at NHTI during the fall 2001 semester to study business. After graduating with an Associate of Science Degree in Business Administration in 2003, Tom transferred to Keene State College, where he earned his Bachelor's Degree in Business Management in 2005. He currently works for Sodexho Food Service at New England College in Henniker.

*"The small classes at NHTI gave me the opportunity to have close contact with the faculty – I really valued their input. I also appreciated being able to enroll in many general education courses, closer to home, at a lower cost , before transferring to a four year college"*

### FIRST YEAR

| FALL SEMESTER | | | CL | LAB | CR |
|---|---|---|---|---|---|
| # AC | 101 | Accounting I | 3 | 0 | 3 |
| # BU | 101 | Introduction to Business | 3 | 0 | 3 |
| EN | 101 | English Composition | 4 | 0 | 4 |
| IT | 102 | PC Applications | 3 | 0 | 3 |
| MT | 123 | Intermediate Algebra | 4 | 0 | 4 |
| | | | | | 17 |

| SPRING SEMESTER | | | | | |
|---|---|---|---|---|---|
| # AC | 102 | Accounting II | 3 | 0 | 3 |
| # BU | 150 | Supervision | 3 | 0 | 3 |
| # BU | 170 | Principles of Marketing | 3 | 0 | 3 |
| EN | 120 | Communications OR | | | |
| EN | xxx | English Elective | 3 | 0 | 3 |
| MT | 125 | Finite Mathematics | 4 | 0 | 4 |
| | | | | | 16 |

### SECOND YEAR

| FALL SEMESTER | | | | | |
|---|---|---|---|---|---|
| # BU | 225 | Business Law I | 3 | 0 | 3 |
| # BU | 250 | Principles of Finance | 3 | 0 | 3 |
| # BU | 270 | Principles of Management | 4 | 0 | 4 |
| # BU | xxx | Business Elective* | 3-4 | 0 | 3-4 |
| EO | 101 | Macroeconomics | 3 | 0 | 3 |
| | | | | | 16-17 |

| SPRING SEMESTER | | | | | |
|---|---|---|---|---|---|
| # BU | xxx | Business Elective** | 3-4 | 0 | 3-4 |
| # BU | 242 | Business Ethics | 3 | 0 | 3 |
| EO | 102 | Microeconomics | 3 | 0 | 3 |
| XX | xxx | Humanities/Fine Arts/ Foreign Language Elective | 3 | 0 | 3 |
| XX | xxx | Science Elective*** | 3 | 0-2 | 3-4 |
| | | | | | 15-17 |

**TOTAL CREDITS** **64-67**

\# *Indicates major field courses.*

* *Any BU, AC, IT or RE course that is not a required course and department head approval*

** *BU 220, BU 226, BU 240, BU 245, BU 255, BU 257, BU 273, BU 275 or BU 290 and/or department head approval.*

*** *BI 100, CH 100 and PH 100 DO NOT meet this requirement*

### Specific Admission Requirements

1. College preparatory course (or equivalent) in English and/or communications; good verbal abilities and writing skills are major considerations for acceptance into the program;
2. High School Algebra I with a grade of "C" or higher ***or*** NHTI's MT 103 ***and*** MT 104, both with grades of "C" or higher.

Though this curriculum is designed to be completed in the format listed, students may choose to take more time, depending on their individual circumstances. Students who anticipate taking more time to complete the program are *strongly encouraged to consult with their department head* at the time of registration each semester to ensure that prerequisite requirements are met and course selection is appropriate.

# Accounting

The Business Administration - Accounting program provides a broad educational background for students who seek careers in accounting, business, or finance. Courses in accounting, business law, management, spreadsheets, economics, English, and mathematics are all part of the program.

By offering advanced accounting courses, the Accounting program prepares graduates to be junior accountants or to transfer to four-year colleges. The degree of Associate in Science with a major in Business Administration with Concentration in Accounting will be awarded upon successful completion of the program.

NHTI has transfer affiliations with four year institutions including:

- Daniel Webster College
- Franklin Pierce College
- New England College
- Plymouth State University
- Rivier College
- Southern New Hampshire University

Students have also transferred to:

- Babson College
- Bentley College
- Bryant College

The Department of Business Administration is a member of the Association of Collegiate Business Schools and Programs (ACBSP).

## FIRST YEAR

| FALL SEMESTER | | | CL | LAB | CR |
|---|---|---|---|---|---|
| # AC | 101 | Accounting I | 3 | 0 | 3 |
| # BU | 101 | Introduction to Business | 3 | 0 | 3 |
| EN | 101 | English Composition | 4 | 0 | 4 |
| IT | 102 | PC Applications | 3 | 0 | 3 |
| MT | 123 | Intermediate Algebra | 4 | 0 | 4 |
| | | | | | 17 |

| SPRING SEMESTER | | | | | |
|---|---|---|---|---|---|
| # AC | 102 | Accounting II | 3 | 0 | 3 |
| EN | 120 | Communications OR | | | |
| EN | xxx | English Elective | 3-4 | 0 | 3-4 |
| IT | 200 | Spreadsheets | 3 | 0 | 3 |
| MT | 125 | Finite Math | 4 | 0 | 4 |
| XX | xxx | Science Elective* | 3-4 | 0 | 3-4 |
| | | | | | 16-18 |

## SECOND YEAR

| FALL SEMESTER | | | CL | LAB | CR |
|---|---|---|---|---|---|
| # AC | 205 | Intermediate Accounting I | 4 | 0 | 4 |
| # AC | 250 | Cost Accounting | 3 | 0 | 3 |
| # BU | 225 | Business Law | 3 | 0 | 3 |
| # BU | 270 | Principles of Management | 4 | 0 | 4 |
| EO | 101 | Macroeconomics | 3 | 0 | 3 |
| | | | | | 17 |

| SPRING SEMESTER | | | | | |
|---|---|---|---|---|---|
| # AC | 206 | Intermediate Accounting II | 4 | 0 | 4 |
| # AC | 230 | Taxes | 4 | 0 | 4 |
| # BU | 250 | Principles of Finance | 3 | 0 | 3 |
| EO | 102 | Microeconomics | 3 | 0 | 3 |
| XX | xxx | Humanities/Fine Arts/ Foreign Language Elective | 3-4 | 0 | 3-4 |
| | | | | | 17-18 |
| | | **TOTAL CREDITS** | | | **67-70** |

*# Indicates major field courses.*

** BI 100, CH 100 and PH 100 do not meet this requirement.*

## Specific Admission Requirements

1. College preparatory course (or equivalent) in English and/ or communications; good verbal abilities and writing skills are major considerations for acceptance into the program;
2. High school Algebra I with a grade of "C" or higher ***or*** NHTI's MT 103 ***and*** MT 104, both with grades of "C" or higher.

## NHTI Alumni Profile

**Jeremy Seeley**
Class of 2003
**Major:** Accounting

Before graduating from NHTI with an associate degree in accounting, Jeremy found a full-time accounting position at Grappone Auto Junction. As a full-time employee of the Grappone Companies, Jeremy will have the benefit of being encouraged and supported to continue his education.

*"Thanks to the confidence the faculty at NHTI showed in my abilities, I was able to realize and reach my full potential. This was possible at NHTI because the small classes allowed me to develop one-on-one relationships with my professors. Thank you to Professors Lynn Hedge, Laura Morgan and Martha Hunt. Your guidance and wisdom will always be a part of me."*

Though this curriculum is designed to be completed in the format listed, students may choose to take more time, depending on their individual circumstances. Students who anticipate taking more time to complete the program are *strongly encouraged to consult with their department head* at the time of registration each semester to ensure that prerequisite requirements are met and course selection is appropriate.

# Marketing

The Business Administration - Marketing program provides a broad education background for students who seek a career in marketing, advertising, or sales. The program includes courses in accounting, business law, supervision, marketing and related research skills, computer skills, economics, English and mathematics, with a strong emphasis on business ethics in major-specific courses.

The degree of Associate in Science with a major in Business Administration with Concentration in Marketing will be awarded upon successful completion of the program.

Having studied contemporary marketing practices, graduates of the program are prepared to enter training positions in marketing management, customer service or sales. Other graduates will transfer to four-year colleges.

NHTI has transfer affiliations with four year institutions including:

- Daniel Webster College
- Franklin Pierce College
- New England College
- Plymouth State University
- Rivier College
- Southern New Hampshire University

Students have also transferred to:

- Babson College
- Bentley College
- Bryant College

The Department of Business Administration is a member of the Association of Collegiate Business Schools and Programs (ACBSP).

## FIRST YEAR

| FALL SEMESTER | | | CL | LAB | CR |
|---|---|---|---|---|---|
| # AC | 101 | Accounting I | 3 | 0 | 3 |
| # BU | 170 | Principles of Marketing | 3 | 0 | 3 |
| EN | 101 | English Composition | 4 | 0 | 4 |
| IT | 102 | PC Applications | 3 | 0 | 3 |
| MT | 123 | Intermediate Algebra | 4 | 0 | 4 |
| | | | | | 17 |
| **SPRING SEMESTER** | | | | | |
| # AC | 102 | Accounting II | 3 | 0 | 3 |
| # BU | 150 | Supervision | 3 | 0 | 3 |
| # BU | 180 | Principles of Retailing | 3 | 0 | 3 |
| EN | 120 | Communications ***or*** | | | |
| EN | xxx | English Elective | 3 | 0 | 3 |
| MT | 125 | Finite Mathematics | 4 | 0 | 4 |
| | | | | | 16 |

## SECOND YEAR

| FALL SEMESTER | | | CL | LAB | CR |
|---|---|---|---|---|---|
| # BU | 174 | Principles of Sales | 3 | 0 | 3 |
| # BU | 225 | Business Law I | 3 | 0 | 3 |
| # BU | 261 | Advertising | 3 | 0 | 3 |
| EO | 101 | Macroeconomics | 3 | 0 | 3 |
| XX | xxx | Science Elective* | 3 | 0-2 | 3-4 |
| | | | | | 15-16 |
| **SPRING SEMESTER** | | | | | |
| # BU | 262 | Consumer Behavior | 3 | 0 | 3 |
| # BU | 265 | Marketing Research | 4 | 0 | 4 |
| # IT | 270 | Web Design and Development I ***or*** | 2 | 2 | 3 |
| # IT/BU | xxx | Elective ** ***or*** | 2 | 2 | 3 |
| # BU | 295 | Marketing Internship | 0 | 9 | 3 |
| EO | 102 | Microeconomics | 3 | 0 | 3 |
| XX | xxx | Humanities/Fine Arts/ Foreign Language Elective | 3 | 0 | 3 |
| | | | | | 16 |
| | | **TOTAL CREDITS** | | | **64-65** |

\# *Indicates major field courses.*

* *BI 100, CH 100 and PH 100 DO NOT meet this requirement*

** *Department Head approval required*

## Specific Admission Requirements

1. College preparatory course (or equivalent) in English and/or communications; good verbal abilities and writing skills are major considerations for acceptance into the program;
2. High school Algebra I with a grade of "C" or higher ***or*** NHTI's MT 103 ***and*** MT 104, both with grades of "C" or higher.

## NHTI Alumni Profile

**Tricia Sheridan**
Class of 2003
**Major:** Marketing and Management

Tricia came to NHTI from Winnacunnet High School. Tricia graduated from NHTI in May 2003 and transferred to Keene State College, where she completed her Bachelor's Degree in Business Management in 2005. While at NHTI, Tricia was very active with the Boys and Girls Club, Alternative Spring Break and the Campus Activities Board. Her goal is to work in a management position with a non-profit organization.

*"While at NHTI I discovered my interests and with the help of the faculty and staff was able to find ways to successfully attain my goals"*

Though this curriculum is designed to be completed in the format listed, students may choose to take more time, depending on their individual circumstances. Students who anticipate taking more time to complete the program are *strongly encouraged to consult with their department head* at the time of registration each semester to ensure that prerequisite requirements are met and course selection is appropriate.

# Sports Management

The Business Administration - Sports Management program is designed for individuals with interests in careers that combine management skills and knowledge of the sports industry. The goal of the program is to develop well-trained business professionals who will enter positions in the administration or management of sports businesses or sports organizations. The degree of Associate of Science with a major in Business Administration with Concentration in Sports Management will be awarded upon successful completion of the program.

## FIRST YEAR

| FALL SEMESTER | | | CL | LAB | CR |
|---|---|---|---|---|---|
| EN | 101 | English Composition | 4 | 0 | 4 |
| IT | 102 | PC Applications | 3 | 0 | 3 |
| MT | 123 | Intermediate Algebra | 4 | 0 | 4 |
| # SM | 101 | Introduction to Sports Management | 3 | 0 | 3 |
| XX | xxx | Science Elective* | 3 | 0-2 | 3-4 |
| | | | | | 17-18 |

| SPRING SEMESTER | | | | | |
|---|---|---|---|---|---|
| # AC | 101 | Accounting I | 3 | 0 | 3 |
| # BU | 150 | Supervision | 3 | 0 | 3 |
| # EN | 120 | Communications | 3 | 0 | 3 |
| # SM | 170 | Sports Marketing | 3 | 0 | 3 |
| # SM | 180 | Public Relations and Advertising for the Sports Industry | 3 | 0 | 3 |
| | | | | | 15 |

## SECOND YEAR

| FALL SEMESTER | | | | | |
|---|---|---|---|---|---|
| # AC | 102 | Accounting II | 3 | 0 | 3 |
| # BU | 270 | Principles of Management | 4 | 0 | 4 |
| # SM | 225 | Sports Law | 3 | 0 | 3 |
| EO | 101 | Macroeconomics ***or*** | | | |
| EO | 102 | Microeconomics | 3 | 0 | 3 |
| # SM | 210 | Sports and Fitness Facilities Management | 3 | 0 | 3 |
| | | | | | 16 |

| SPRING SEMESTER | | | | | |
|---|---|---|---|---|---|
| # SM | xxx | Sports Management Elective or | 3 | 0 | 3 |
| SM | 290 | Sports Management Internship | 0 | 9 | 3 |
| # SM | 250 | Sports and Society | 4 | 0 | 4 |
| SO | xxx | Social Science Elective+ | 3 | 0 | 3 |
| XX | xxx | Humanities/Fine Arts/ Foreign Language Elective | 3 | 0 | 3 |
| XX | xxx | General Education Elective | 3-4 | 0 | 3-4 |
| | | | | | 16-17 |

**TOTAL CREDITS** **64-66**

*# Indicates major field courses.*

** BI 100, CH 100 and PH 100 do not meet this requirement.*

*+Any course with a prefix of AN, EO, HI, PS, PY, or SO*

## NHTI Faculty Profile

**Michael Moffett**
*Department Head,*
*Sports Management*

B.S., Plymouth State University
M.Ed., Plymouth State University

Michael Moffett has taught in the NHTI Sports Management program since its inception in 1997. Moffett did his undergraduate work at the University of New Hampshire and at Plymouth State University, where he also earned a Master's Degree in Education. Besides teaching on the high school level and at Plymouth State University, Moffett spent 14 years in College Sports Information and Public Relations. A former sports columnist, Moffett has helped produce cable television sports programming. A Persian Gulf veteran and a Lieutenant Colonel in the Marine Corps Reserve, Moffett has also served as a Department Head at the summer Marine Corps Enlisted Commissioning Prep School in San Diego.

*"The Sports Management program at NHTI offers wonderful opportunities for those seeking careers associated with the high-energy and people-centered sports industry. Students get broad exposure as to how business, management, and marketing principles apply to sports-related endeavors. A Sports Management degree not only gives an NHTI graduate an edge concerning employment opportunities in this field but could also be a stepping stone to baccalaureate and graduate degrees as well."*

## Specific Admission Requirements

1. College preparatory course (or equivalent) in English and/ or communications; good verbal abilities and writing skills are major considerations for acceptance into the program;
2. High school Algebra I with a grade of "C" or higher ***or*** NHTI's MT 103 ***and*** MT 104, both with grades of "C" or higher.

### Internship Considerations

The college must ensure that individuals (customers, employees, etc.) at internship and service learning sites are not adversely affected by students during learning experiences. Therefore, students participating in internship and field experiences must demonstrate the emotional stability required to exercise sound judgment, accept direction and guidance from a supervisor or faculty member and establish rapport and maintain sensitive interpersonal relationships with employees, customers and clients.

Though this curriculum is designed to be completed in the format listed, students may choose to take more time, depending on their individual circumstances. Students who anticipate taking more time to complete the program are *strongly encouraged to consult with their department head* at the time of registration each semester to ensure that prerequisite requirements are met and course selection is appropriate.

# Hotel Administration

The hotel industry continues to grow and expand in the new millennium and New Hampshire's hotel industry has been no exception. The opportunities for professional growth within the hospitality industry are excellent. The Hotel Administration program will prepare students for positions such as front office management and event, meeting and convention planning as well as assisting the sales and marketing areas of the hotel. Emphasis is placed on the business side of hotel management through marketing, legal, accounting and management operations.

Students are encouraged to participate in an internship, to gain work experience in the hotel industry. The Walt Disney Internship program has been one of the sites students have chosen in addition to many hotel and tourism areas throughout the New Hampshire/New England region.

Student will have the opportunity to travel with the Travel and Tourism majors on various trips. Site and hotel inspections are required to examine the tourism/business opportunities of the destination.

The degree of Associate in Science with a major in Hotel Administration will be awarded upon successful completion of the program.

## FIRST YEAR

| | | | CL | LAB | CR |
|---|---|---|---|---|---|
| **FALL SEMESTER** | | | | | |
| | EN 101 | English Composition | 4 | 0 | 4 |
| # | GY 135 | Destination Travel Geography I | 3 | 0 | 3 |
| | IT 102 | PC Applications | 3 | 0 | 3 |
| | MT 120 | Contemporary College Mathematics* | 4 | 0 | 4 |
| # | TR 101 | Introduction to the Hospitality and Tourism Industry | 3 | 0 | 3 |
| | | | | | 17 |
| **SPRING SEMESTER** | | | | | |
| | BU 150 | Supervision | 3 | 0 | 3 |
| | BU 170 | Principles of Marketing | 3 | 0 | 3 |
| | EN 120 | Communications | 3 | 0 | 3 |
| # | HR 110 | Introduction to Hotel Operations | 3 | 0 | 3 |
| # | HR 245 | Event, Meeting and Convention Planning | 3 | 0 | 3 |
| | | | | | 15 |

## SECOND YEAR

| | | | CL | LAB | CR |
|---|---|---|---|---|---|
| **FALL SEMESTER** | | | | | |
| | AC 101 | Accounting I | 3 | 0 | 3 |
| | FL xxx | Foreign Language+ | 3 | 0 | 3 |
| # | HR 225 | Front Office Operations | 3 | 0 | 3 |
| | BU 225 | Business Law I ***or*** | | | |
| # | HR 227 | Legal Issues for the Hospitality Industry** | 3 | 0 | 3 |
| | XX xxx | Science Elective*** | 3 | 2 | 4 |
| | | | | | 16 |
| **SPRING SEMESTER** | | | | | |
| | HI 221 | New Hampshire History ***or*** | | | |
| | HI xxx | History Elective**** | 3 | 0 | 3 |
| # | HR 269 | Food and Beverage Management | 3 | 0 | 3 |
| # | HR 293 | Senior Hospitality Seminar | 2 | 0 | 2 |
| # | HR 290 | Hotel Administration Internship ***or*** | 0 | 9 | 3 |
| # | HR 260 | Hospitality Sales and Marketing | 3 | 0 | 3 |
| | XX xxx | General Education Elective | 3 | 0 | 3 |
| | XX xxx | General Education Elective | 3 | 0 | 3 |
| | | | | | 17 |
| | | **TOTAL CREDITS** | | | **65** |

\# *Indicates major field courses.*

* *Students must complete MT 120 to graduate. Depending on results of assessment testing, students may be required to complete MT 103 prior to MT 120 (please note that MT 103 Algebra I - Part I, with a grade of "C" or higher, or the high school equivalent with a grade of "C" or higher, is the prerequisite for MT 120).*

** *HR 227 is offered only in the evening*

*** *BI 100, CH 100 and PH 100 do not meet this requirement.*

**** *Excludes HI 104 and HI 105*

\+ *FL 104 and FL 105 do not meet this requirement.*

## Specific Admission Requirements

1. College preparatory course (or equivalent) in English and/or Communications; good verbal abilities and writing skills are major considerations in the acceptance into the Travel and Tourism and Hotel Administration Programs;
2. Computer keyboarding skills are essential; and
3. Please refer to starred* statement on this page regarding mathematics graduation requirement.

### Internship Considerations

The college must ensure that individuals (customers, employees, etc.) at internship and service learning sites are not adversely affected by students during learning experiences. Therefore, students participating in internship and field experiences must demonstrate the emotional stability required to exercise sound judgment, accept direction and guidance from a supervisor or faculty member and establish rapport and maintain sensitive interpersonal relationships with employees, customers and clients.

## NHTI Faculty Profile

**Maryanne S. Adams**
*Department Head,*
*Travel and Tourism/*
*Hotel Administration*

B.S., Hood College
M.S., New Hampshire College
M.B.A., Plymouth State University

Professor Adams came to NHTI in 1992 and has been a prime mover behind the establishment of NHTI's Travel and Tourism Program as one of the region's finest.

*"With our global economy, travel has become a necessity. Understanding the needs of diverse cultures is the basis for delivering excellent service in a hospitality environment."*

Though this curriculum is designed to be completed in the format listed, students may choose to take more time, depending on their individual circumstances. Students who anticipate taking more time to complete the program are *strongly encouraged to consult with their department head* at the time of registration each semester to ensure that prerequisite requirements are met and course selection is appropriate.

# Real Estate

The Real Estate program will prepare students for a career in Real Estate, either as an associate working under the supervision of a broker (and then if he/she chooses, as the owner of a real estate business) or in one of the many other careers in the field of Real Estate. It will provide the student with a very practical business education, and an excellent grounding in general business practices which may be applied not only in real estate, but in any business career. This program facilitates understanding of a wide spectrum of real estate knowledge, from basic licensing laws through sophisticated investment strategies.

The primary objective of the Real Estate Program is to provide its graduates with an optimum chance to succeed from the very beginning of their career in real estate. The degree of Associate in Science with a major in Real Estate will be awarded upon successful completion of the program.

Please note that major field courses are available evenings only. Students are **not** required to complete all coursework within two years.

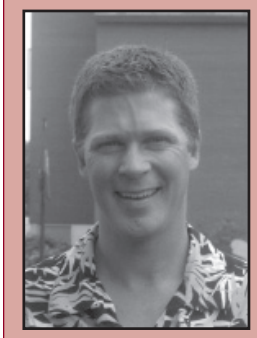
## FIRST YEAR

| FALL SEMESTER | | | CL | LAB | CR |
|---|---|---|---|---|---|
| # AC | 101 | Accounting I | 3 | 0 | 3 |
| EN | 101 | English Composition | 4 | 0 | 4 |
| IT | 102 | PC Applications | 3 | 0 | 3 |
| MT | 120 | Contemporary College Mathematics* | 4 | 0 | 4 |
| # RE | 101 | Fundamentals of Real Estate | 3 | 0 | 3 |
| | | | | | 17 |

| SPRING SEMESTER | | | | | |
|---|---|---|---|---|---|
| # AC | 102 | Accounting II | 3 | 0 | 3 |
| EN | xxx | English Elective | 3 | 0 | 3 |
| # RE | 102 | Real Estate Marketing and Advertising | 3 | 0 | 3 |
| # RE | 162 | Real Estate Computer Applications | 2 | 2 | 3 |
| # RE | 201 | Real Estate Internship I** | 1 | 10 | 4 |
| | | | | | 16 |

### Internship Considerations

The college must ensure that individuals (customers, employees, etc.) at internship and service learning sites are not adversely affected by students during learning experiences. Therefore, students participating in internship and field experiences must demonstrate the emotional stability required to exercise sound judgment, accept direction and guidance from a supervisor or faculty member and establish rapport and maintain sensitive interpersonal relationships with employees, customers and clients.



### NHTI Alumni Profile

**Gregg Hough**
Class of 2005
**Major:** Real Estate

*"Education is vital in today's competitive market. I'd been out of school for 19 years when I came to NHTI. To say it changed my life is an understatement. I was able to successfully change careers while earning my Associate's Degree. Everyone at NHTI was so helpful and supportive that I plan to continue my education to obtain a BS in Business and then a Master's Degree."*

Gregg is now a Sales Associate, RE/MAX Lakes & Mountains

## SECOND YEAR

| FALL SEMESTER | | | | | |
|---|---|---|---|---|---|
| PI | 242 | Contemporary Ethical Issues | 3 | 0 | 3 |
| # RE | 220 | Real Estate Finance | 3 | 0 | 3 |
| # RE | 223 | Commercial Real Estate | 3 | 0 | 3 |
| XX | xxx | General Education Elective | 3-4 | 0 | 3-4 |
| XX | xxx | Social Science Elective*** | 3 | 0 | 3 |
| | | | | | 15-16 |

| SPRING SEMESTER | | | | | |
|---|---|---|---|---|---|
| EO | 101 | Macroeconomics ***or*** | | | |
| EO | 102 | Microeconomics | 3 | 0 | 3 |
| # RE | 221 | Real Estate Brokerage Management | 3 | 0 | 3 |
| # RE | 222 | Real Estate Investment and Taxation | 3 | 0 | 3 |
| # RE | 225 | Property Management | 3 | 0 | 3 |
| XX | xxx | Science Elective+ | 3 | 2 | 4 |
| | | | | | 16 |

**TOTAL CREDITS** **64-65**

\# *Indicates major field courses.*

* *Students must complete MT 120 to graduate. Depending on results of assessment testing, students may be required to complete MT 103 prior to MT 120 (please note that MT 103 Algebra I - Part I, with a grade of "C" or higher, or the high school equivalent with a grade of "C" or higher, is the prerequisite for MT 120).*

** *Real Estate Internship requires 2.0 GPA to enroll*

*** *Any course with a prefix of AN, EO, HI, PS, PY or SO.*

\+ *BI 100, CH 100 and PH 100 do not meet this requirement.*

### Specific Admission Requirements

1. Please refer to starred* statement on this page regarding mathematics graduation requirement.

Though this curriculum is designed to be completed in the format listed, students may choose to take more time, depending on their individual circumstances. Students who anticipate taking more time to complete the program are *strongly encouraged to consult with their department head* at the time of registration each semester to ensure that prerequisite requirements are met and course selection is appropriate.

# Travel and Tourism

The Travel and Tourism program prepares students for an exciting career in the tourism industry. The goal of the program is for students to understand the interrelationship tourism plays with the local, state and global economy. Students have the opportunity to explore the various career avenues they may take in the tourism industry. Growth within the industry continues at a good pace with good starting salaries and benefits. Tourism professionals prosper with rapid career advancement.

At NHTI, emphasis is placed on elements of tourism: transportation, accommodation, destination geography, attraction, and food and beverage management. Computer technology (Microsoft Office and Worldspan), sales, marketing, customer service and communication techniques are also studied.

Travel and Tourism majors have the opportunity to participate in various travel experiences. Site and hotel inspections are required to examine the tourist/business opportunities of the destination. Internships are encouraged to gain experience in the tourism industry. Students have worked in a variety of locations including New Hampshire State Tourism Office, Concord Chamber of Commerce, AAA of Concord and Walt Disney World.

The degree of Associate in Science with a major in Travel and Tourism will be awarded upon completion of the program.

## FIRST YEAR

| FALL SEMESTER | | | CL | LAB | CR |
|---|---|---|---|---|---|
| | EN 101 | English Composition | 4 | 0 | 4 |
| # | GY 135 | Destination Travel Geography I | 3 | 0 | 3 |
| | IT 102 | PC Applications | 3 | 0 | 3 |
| | MT 120 | Contemporary College Mathematics* | 4 | 0 | 4 |
| # | TR 101 | Introduction to the Hospitality and Tourism Industry | 3 | 0 | 3 |
| | | | | | 17 |

| SPRING SEMESTER | | | | | |
|---|---|---|---|---|---|
| | BU 150 | Supervision | 3 | 0 | 3 |
| | BU 170 | Introduction to Marketing | 3 | 0 | 3 |
| | EN 120 | Communications | 3 | 0 | 3 |
| # | GY 137 | Destination Travel Geography II | 3 | 0 | 3 |
| # | TR 125 | Travel Industry Procedures | 4 | 0 | 4 |
| | | | | | 16 |

## Specific Admission Requirements

1. College preparatory course (or equivalent) in English and/or Communications; good verbal abilities and writing skills are major considerations in the acceptance into the Travel and Tourism and Hotel Administration Programs;
2. Computer keyboarding skills are essential; and
3. Please refer to starred* statement on this page regarding mathematics graduation requirement.

### Internship Considerations

The college must ensure that individuals (customers, employees, etc.) at internship and service learning sites are not adversely affected by students during learning experiences. Therefore, students participating in internship and field experiences must demonstrate the emotional stability required to exercise sound judgment, accept direction and guidance from a supervisor or faculty member and establish rapport and maintain sensitive interpersonal relationships with employees, customers and clients.

## SECOND YEAR

| FALL SEMESTER | | | CL | LAB | CR |
|---|---|---|---|---|---|
| | AC 101 | Accounting I ***or*** | | | |
| | XX xxx | Travel Elective ** | 3 | 0 | 3 |
| | FL xxx | Foreign Language*** | 3 | 0 | 3 |
| | BU 225 | Business Law I ***or*** | | | |
| # | HR 227 | Legal Issues for the Hospitality Industry+ | 3 | 0 | 3 |
| # | TR 210 | E-Travel | 2 | 2 | 3 |
| | XX xxx | Science Elective++ | 3 | 2 | 4 |
| | | | | | 16 |

| SPRING SEMESTER | | | | | |
|---|---|---|---|---|---|
| # | TR 280 | Senior Travel Seminar | 2 | 0 | 2 |
| # | TR 290 | Travel Internship ***or*** | 0 | 9 | 3 |
| | HR 260 | Hospitality Sales and Marketing | 3 | 0 | 3 |
| | HI 221 | New Hampshire History ***or*** | | | |
| | HI xxx | History Elective+++ | 3 | 0 | 3 |
| | XX xxx | General Education Elective | 3 | 0 | 3 |
| | XX xxx | General Education Elective | 3 | 0 | 3 |
| | XX xxx | Travel Elective** | 3 | 0 | 3 |
| | | | | | 17 |

**TOTAL CREDITS** **66**

* *Students must complete MT 120 to graduate. Depending on results of assessment testing, students may be required to complete MT 103 prior to MT 120 (please note that MT 103 Algebra I - Part I, with a grade of "C" or higher, or the high school equivalent with a grade of "C" or higher, is the prerequisite for MT 120).*

** *Any course with a prefix of AC, BU, HR, IT, TR*

*** *FL 104 and FL 105 do not meet this requirement.*

\+ *HR 227 is offered only in the evening*

++ *BI 100, CH 100 and PH 100 do not meet this requirement*

+++*Excludes HI 104 and HI 105*

\# *Indicates major field courses.*

## Student Travel Experience Spain: Spring 2003

The Travel and Tourism/Hotel Administration students spent 9 days in Spain during Spring Break 2003. This trip gave students the opportunity for classroom education and to experience the culture of Spain. Upon return from the trip, students completed a "familiarization packet" designed to analyze their experiences. Past trips have included Bermuda and cruises to the Bahamas, St. Martin and St. Thomas.

Though this curriculum is designed to be completed in the format listed, students may choose to take more time, depending on their individual circumstances. Students who anticipate taking more time to complete the program are *strongly encouraged to consult with their department head* at the time of registration each semester to ensure that prerequisite requirements are met and course selection is appropriate.

# COMPUTER PROGRAMS



## Information Technology

The Information Technology (IT) Associate Degree program *(formerly Computer Information Systems)* offers students technical and professional preparation for careers in information technology. All degree candidates study the core IT competencies including Unix/Linux and Microsoft Windows operating systems, business applications developer, programming, PC hardware, and fundamentals of the Internet and networking. In their second year, students concentrate in one of three areas: Applications Development (programming/database/Internet), Network Design and Administration, or Technical Support.

The degree of Associate in Science with a major in Information Technology is awarded upon successful completion of the program. Many graduates continue their formal education in a bachelor's degree program at another college. Others begin professional careers by obtaining positions as technical support analysts, programmers, network administrators, database administrators or web site developers.

- The Information Technology Department at NHTI is a regional and local Cisco Certified Academy and offers all students a certified basic Cisco networking course – Introduction to Networking (IT 150).
- The department also offers a course in personal computer hardware and software (IT 108) which prepares students to sit for the CompTIA A+ certification, a widely recognized vendor-neutral certification for service technicians.
- Students choosing the Network Design and Administration option take two additional courses – Networking Theory I (IT 250) and Networking Theory II (IT 252). These courses prepare students to sit for the Cisco Certified Network Associate exam (CCNA).
- Students choosing the Applications Development option are given the opportunity to learn object oriented programming in the Visual Basic.NET (IT 212) and the Java (IT 210) languages, database design, Visio modeling and SQL. They then apply these skills in business application development for Windows or web environments.
- Students choosing the Technical Support option acquire a broad base of IT knowledge and also study communication and interpersonal effectiveness, incident tracking, prioritization escalation and resolution, call handling applications, user documentation, diagnostic scripts and system imaging (IT 220).

### Senior Project

All students are required to complete a senior project which is usually an internship in the area of his or her concentration and career goals. The internship provides real-life experience applying skills learned in the classroom. Employers work closely with the students and professors to ensure an environment that enhances each student's education, provides experience and introduces the student to the IT business environment.

### Internship Considerations

The college must ensure that individuals (customers, employees, etc.) at internship and service learning sites are not adversely affected by students during learning experiences. Therefore, students participating in internship and field experiences must demonstrate the emotional stability required to exercise sound judgment, accept direction and guidance from a supervisor or faculty member and establish rapport and maintain sensitive interpersonal relationships with employees, customers and clients.

### NHTI Faculty Profile

**William Shurbert**
Information Technology

A.S., Computer Information Systems
New Hampshire Technical Institute

B.S., Technical Management
Southern New Hampshire University

*"I came to NHTI as a student to pursue a career in the computer science field. NHTI provided me with a solid background in information technology and the necessary skills to succeed in the high-tech business environment. As a professor, I've been able to bring real-life situations and personal experiences into the classroom which helps to create a learning environment that keeps the students interested and motivated to learn."*

**FIRST YEAR**

| FALL SEMESTER | | | CL | LAB | CR |
|---|---|---|---|---|---|
| EN | 101 | English Composition | 4 | 0 | 4 |
| # IT | 106 | IT Career Topics | 2 | 0 | 1 |
| # IT | 108 | Personal Computer Hardware and Software | 2 | 2 | 3 |
| # IT | 110 | Programming Fundamentals | 2 | 2 | 3 |
| MT | 123 | Intermediate Algebra | 4 | 0 | 4 |
| SO | xxx | Social Science Elective* | 3 | 0 | 3 |
| | | | | | 18 |
| **SPRING SEMESTER** | | | | | |
| EN | 125 | Communications and the Literature of Science and Technology ***or*** | | | |
| EN | xxx | English Elective | 3 | 0 | 3 |
| # IT | 140 | Database Design and Management | 2 | 2 | 3 |
| # IT | 150 | Introduction to Networking | 2 | 2 | 3 |
| # IT | 180 | Introduction to Unix Operating Systems | 2 | 2 | 3 |
| MT | 125 | Finite Mathematics | 4 | 0 | 4 |
| | | | | | 16 |

### Specific Admission Requirements

1. High school Algebra I with a grade of "C" or better **OR** NHTI's MT 103 **and** MT 104 with grades of "C" or better;
2. Computer keyboarding skills are assumed.

Though this curriculum is designed to be completed in the format listed, students may choose to take more time, depending on their individual circumstances. Students who anticipate taking more time to complete the program are *strongly encouraged to consult with their department head* at the time of registration each semester to ensure that prerequisite requirements are met and course selection is appropriate.

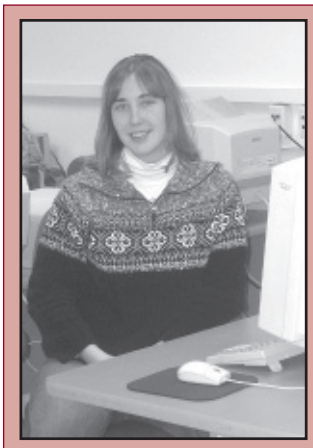
## SECOND YEAR
## APPLICATIONS DEVELOPMENT OPTION

| FALL SEMESTER | | | CL | LAB | CR |
|---|---|---|---|---|---|
| # IT | 212 | Visual Basic.NET | 2 | 2 | 3 |
| # IT | 280 | Windows Server Operating System | 2 | 2 | 3 |
| # IT | 290 | Managing Information Systems | 2 | 2 | 3 |
| # IT | 292 | Senior IT Project Preparation | 1 | 0 | 1 |
| IT | xxx | Information Technology Elective+ | 2 | 2 | 3 |
| XX | xxx | Science Elective** | 3-4 | 0 | 3-4 |
| | | | | | 16-17 |
| **SPRING SEMESTER** | | | | | |
| # IT | 240 | Database Implementation | 2 | 2 | 3 |
| # IT | 294 | Senior IT Project | 1 | 4 | 3 |
| # IT | xxx | Information Technology Elective+ | 2 | 2 | 3 |
| XX | xxx | General Education Elective | 3-4 | 0 | 3-4 |
| XX | xxx | Humanities/Fine Arts/ Foreign Language Elective | 3 | 0 | 3 |
| | | | | | 15-16 |
| | | **TOTAL CREDITS** | | | **65-67** |

The **NHTI Gamers League** offers students a unique opportunity to interact with other students and faculty in a non-academic setting. Students are able to develop leadership skills and meet new people from other academic disciplines in a fun and friendly environment.

## SECOND YEAR
## TECHNICAL SUPPORT OPTION

| FALL SEMESTER | | | | | |
|---|---|---|---|---|---|
| # IT | 250 | Networking Theory I | 2 | 2 | 3 |
| # IT | 280 | Windows Server Operating Systems | 2 | 2 | 3 |
| # IT | 290 | Managing Information Systems | 2 | 2 | 3 |
| # IT | 292 | Senior IT Project Preparation | 1 | 0 | 1 |
| IT | xxx | Information Technology Elective | 2 | 2 | 3 |
| XX | xxx | Science Elective** | 3-4 | 0 | 3-4 |
| | | | | | 16-17 |
| **SPRING SEMESTER** | | | | | |
| # IT | 220 | Technical Support Tools and Skills | 2 | 2 | 3 |
| # IT | 294 | Senior IT Project | 1 | 4 | 3 |
| # IT | xxx | Information Technology Elective | 2 | 2 | 3 |
| XX | xxx | General Education Elective | 3-4 | 0 | 3-4 |
| XX | xxx | Humanities/Fine Arts/ Foreign Language Elective | 3 | 0 | 3 |
| | | | | | 15-16 |
| | | **TOTAL CREDITS** | | | **65-67** |



## NHTI Alumni Profile

**Heather Hardy**
Class of 2004
**Major:** Computer Information Systems

"I am a 2004 Computer Information Systems graduate from NHTI. The information I obtained from attending NHTI, gave me a foundation in many aspects of the computer industry. That knowledge base allowed me to expand my areas of expertise in my position as the Database Administrator at New Hampshire Healthy Kids. I am constantly faced with problems that need my attention and the understanding I gained from the instructors at NHTI gives me a basis to start troubleshooting. I am glad that I chose NHTI for my Associates Degree."

## SECOND YEAR
## NETWORKING OPTION

| FALL SEMESTER | | | | | |
|---|---|---|---|---|---|
| # IT | 250 | Networking Theory I | 2 | 2 | 3 |
| # IT | 280 | Windows Server Operating Systems | 2 | 2 | 3 |
| # IT | 290 | Managing Information Systems | 2 | 2 | 3 |
| # IT | 292 | Senior IT Project Preparation | 1 | 0 | 1 |
| IT | xxx | Information Technology Elective | 2 | 2 | 3 |
| XX | xxx | Science Elective** | 3-4 | 0 | 3-4 |
| | | | | | 16-17 |
| **SPRING SEMESTER** | | | | | |
| # IT | 252 | Networking Theory II | 2 | 2 | 3 |
| # IT | 262 | Network Security I | 2 | 2 | 3 |
| # IT | 294 | Senior IT Project | 1 | 4 | 3 |
| XX | xxx | General Education Elective | 3-4 | 0 | 3-4 |
| XX | xxx | Humanities/Fine Arts/ Foreign Language Elective | 3 | 0 | 3 |
| | | | | | 15-16 |
| | | **TOTAL CREDITS** | | | **65-67** |

*# Indicates major field courses.*
** Any course with a prefix of AN, EO, HI, PS, PY or SO*
*** BI 100, CH 100 and PH 100 do not meet this requirement.*
*+ Applications Development students must take IT 210, IT 214* ***OR*** *IT 272 although taking all three courses is highly recommended.*

Though this curriculum is designed to be completed in the format listed, students may choose to take more time, depending on their individual circumstances. Students who anticipate taking more time to complete the program are *strongly encouraged to consult with their department head* at the time of registration each semester to ensure that prerequisite requirements are met and course selection is appropriate.

# EDUCATION PROGRAMS

## Early Childhood Education

The Early Childhood Education Associate Degree program of professional studies provides students with the theoretical foundations and practical experiences necessary for certification as directors and teachers in childcare centers, nursery schools and private kindergartens responsible for the care and education of young children and qualified to independently implement developmentally appropriate and inclusionary activities. Graduates may also be eligible for positions as educational assistants in public schools as well as for further study at four year colleges.

The degree of Associate in Science with a major in Early Childhood Education will be awarded upon the successful completion of this program.

Students wishing to carry a lighter course load may spread the program over three years.

Please refer to *page 83* for suggestions on transferring to other institutions.

### FIRST YEAR

| FALL SEMESTER | | | CL | LAB | CR |
|---|---|---|---|---|---|
| # EC | 125 | Growth and Development of the Young Child* | 4 | 0 | 4 |
| # EC | 141 | Curriculum and Environments 1* | 3 | 0 | 3 |
| # EC | 155 | Children's Literature | 3 | 0 | 3 |
| EN | 101 | English Composition** | 4 | 0 | 4 |
| IT | 102 | PC Applications | 3 | 0 | 3 |
| | | | | | 17 |

| SPRING SEMESTER | | | | | |
|---|---|---|---|---|---|
| # EC | 102 | Foundations in Early Childhood Education and Child Care* | 3 | 0 | 3 |
| # EC | 142 | Curriculum and Environments 2** | 3 | 0 | 3 |
| # EC | 190 | Preparing for Practicum | 1 | 0 | 1 |
| # EC | 188 | Health, Safety and Nutrition in Early Childhood Education* | 3 | 0 | 3 |
| MT | 120 | Contemporary College Mathematics+ | 4 | 0 | 4 |
| PY | 105 | Introduction to Psychology | 3 | 0 | 3 |
| | | | | | 17 |

### SECOND YEAR

| FALL SEMESTER | | | CL | LAB | CR |
|---|---|---|---|---|---|
| # EC | 242 | Child, Family and Community** | 3 | 0 | 3 |
| # EC | 250 | Observation, Interpretation, Assessment and Documentation** | 3 | 0 | 3 |
| # EC | 275 | Practicum 1 – Child Study and Portfolio** | 2 | 5 | 3 |
| EN | 120 | Communications | 3 | 0 | 3 |
| XX | xxx | Humanities/Fine Arts/ Foreign Language Elective | 3 | 0 | 3 |
| XX | xxx | Science Elective++ | 3 | 2 | 4 |
| | | | | | 19 |

| SPRING SEMESTER | | | | | |
|---|---|---|---|---|---|
| # EC | 265 | Developmentally Appropriate Guidance of the Young Child | 3 | 0 | 3 |
| # EC | 276 | Practicum 2 - Exploring Emergent Curriculum and Student Teaching | 2 | 10 | 5 |
| # EC | 288 | The Early Childhood Professional | 3 | 0 | 3 |
| XX | xxx | General Education Elective | 3 | 0 | 3 |
| XX | xxx | Social Science Elective+++ | 3 | 0 | 3 |
| | | | | | 17 |

**TOTAL CREDITS** **70**

* *EC 102, 125, 141 and 188 are certificate courses.*

** *EC 142, 242, 250, 275 and EN 101, in addition to the certificate courses above, are diploma courses.*

\+ *Students must complete MT 120 to graduate. Depending on results of assessment testing, students may be required to complete MT 103 prior to MT 120 (please note that MT 103 Algebra I - Part I, with a grade of "C" or higher, or the high school equivalent with a grade of "C" or higher, is the prerequisite for MT 120).*

++ *BI 100, CH 100, and PH 100 do not meet this requirement.*

+++ *Any course with a prefix of AN, EO, HI, PS, PY or SO*

\# *Indicates major field courses.*

### Specific Admission Requirements

1. A personal interview may be required or requested by the Department Head of Early Childhood Education;
2. College preparatory course (or equivalent) in English and/or Communications is expected; good verbal abilities and writing skills are a major consideration for acceptance into the Program.
3. Please refer to + statement on this page regarding mathematics graduation requirement.

***Health, Character and Technical Standards, see page 30.***

Though this curriculum is designed to be completed in the format listed, students may choose to take more time, depending on their individual circumstances. Students who anticipate taking more time to complete the program are *strongly encouraged to consult with their department head* at the time of registration each semester to ensure that prerequisite requirements are met and course selection is appropriate.

# Education (Associate in Arts)

This program is designed to prepare NHTI students to transfer to a baccalaureate teacher certification program. It is generic, preparing students to select areas of certification at the baccalaureate level in elementary, middle, and secondary education. It requires students to take the PRAXIS I exam, successfully achieving the minimum passing score required by the New Hampshire State Board of Education prior to their graduation from the program. The program has a common first year of course work. In the second year students elect an educational transfer focus in any of the following areas: math; science; social science or English. Elective courses for each area of study can be obtained from the program faculty. Students will declare their focus before the beginning of their second year of the program. This allows a student to begin to develop the subject content area for certification needed for a BA/BS degree.

The degree of Associate in Arts with a major in Education will be awarded upon successful completion of all program requirements.

*NHTI has a transfer agreement with Plymouth State University.*



## FIRST YEAR

| FALL SEMESTER | | | CL | LAB | CR |
|---|---|---|---|---|---|
| # ED | 101 | Introduction to Exceptionalities | 3 | 0 | 3 |
| # ED | 104 | Foundations of Education | 3 | 0 | 3 |
| EN | 101 | English Composition | 4 | 0 | 4 |
| IT | 102 | PC Applications | 3 | 0 | 3 |
| PY | 105 | Introduction to Psychology | 3 | 0 | 3 |
| | | | | | 16 |
| **SPRING SEMESTER** | | | | | |
| AN | 101 | Introduction to Cultural Anthropology | 3 | 0 | 3 |
| # ED | 207 | Teaching and Learning Process | 3 | 0 | 3 |
| EN | xxx | English Literature Elective | 3 | 0 | 3 |
| PY | 209 | Educational Psychology | 3 | 0 | 3 |
| PY | 220 | Human Growth and Development: The Life Span | 3 | 0 | 3 |
| | | | | | 15 |

## NHTI Faculty Profile

**Dr. James A. Pietrovito**

*Professor of Social Science and Education*

B.A., Lycoming College
M.Ed., University of Vermont
C.A.G.S., University of Vermont
Ed.D., George Peabody College of Vanderbilt University

Professor Pietrovito came to NHTI as a full-time faculty member after 17 years as a Planning Consultant and Dean of Community Education for the State of New Hampshire where he gained significant experience designing and delivering learning experiences specific to the needs of the world of work in accordance with the policies and procedures of state government.

*"I appreciate the diversity of the NHTI student body. Different perspectives help bring our subjects to life! I enjoy being involved in the "core" activities of a learning community. Working directly with learners is challenging and invigorating!"*

## SECOND YEAR

| FALL SEMESTER | | | CL | LAB | CR |
|---|---|---|---|---|---|
| MT | xxx | Math * | 4-5 | 0 | 4-5 |
| XX | xxx | Laboratory Science ** | 3 | 2 | 4 |
| XX | xxx | Humanities Elective *** | 3 | 0 | 3 |
| XX | xxx | Educational Transfer Focus Elective+ ***or*** General Education Elective | 3 | 0 | 3 |
| XX | xxx | Educational Transfer Focus Elective+ ***or*** General Education Elective | 3 | 0 | 3 |
| | | | | | 17-18 |
| **SPRING SEMESTER** | | | | | |
| MT | xxx | Math* | 4-5 | 0 | 4-5 |
| PS | xxx | Government | 3 | 0 | 3 |
| XX | xxx | Laboratory Science ** | 3 | 2 | 4 |
| XX | xxx | Humanities*** | 3 | 0 | 3 |
| XX | xxx | Educational Transfer Focus Elective+ ***or*** General Education Elective | 3 | 0 | 3 |
| | | | | | 17 |
| | | **TOTAL CREDITS** | | | **65-67** |

\# *Indicates major field courses.*

* *Math electives can only be Intermediate Algebra, Finite Math, Elementary Functions, Statistics, Pre-Calculus, Calculus*

** *Lab Sciences are those sciences with a laboratory component, excluding BI 100, CH 100, and PH 100. In some education programs, sequential programming may be required, where in elementary education for example, multiple science programs would be acceptable. Please check with academic advisor prior to scheduling.*

*** *Recommend Art, Music, History, Philosophy*

\+ *Educational Transfer Focus Electives. Students will select predesigned transfer courses. Options may include any of the following areas: Science, Social Science, English or Math. A list of approved courses for each option is available from the program coordinator.*

## Specific Admission Requirements

1. Algebra I with a grade of "C" or higher or NHTI's MT 103 and MT 104 both with grades of "C" or higher;
2. Strong verbal and written English language skills are major considerations for acceptance;
3. Personal interview with Department Head and/or faculty member may be required;
4. Credit for experiential learning, workshops and/or college courses taken at other institutions is available; students interested in receiving credit must supply appropriate documentation and meet with the Director of Admissions and the Department Head.

***Health, Character and Technical Standards, see page 30.***

# Education (Associate in Science)

The Associate in Science in Education (ASEd) program concentrates on the foundations of education in a well-balanced approach. The program provides students with opportunities to immerse themselves in the theoretical underpinnings and practical applications of education while completing associate degree requirements. Students who complete this program have the basic skills and knowledge to work effectively with all students in public school classrooms, including those students identified with special needs.

The degree of Associate in Science with a major in Education is awarded upon successful completion of the program. By offering a broad range of courses, the Program prepares graduates to be Paraeducators or to transfer their credits to baccalaureate degree-granting institutions to pursue a career in teaching or counseling.

All students in the ASEd program are expected to achieve a minimum passing score stipulated by the NH Department of Education on the PRAXIS I exam. Those students who intend to transfer to one of the colleges in the University System of NH must achieve a minimum GPA of 2.7 in addition to passing the PRAXIS I exam.

NHTI has transfer affiliations with baccalaureate degree-granting institutions. To date, students have successfully transferred as juniors to Notre Dame College (now absorbed by Southern New Hampshire University), Franklin Pierce College, Granite State College (part of the University System of New Hampshire), New England College and Rivier College.

## FIRST YEAR

| FALL SEMESTER | | | CL | LAB | CR |
|---|---|---|---|---|---|
| # ED | 101 | Introduction to Exceptionalities | 3 | 0 | 3 |
| # ED | 104 | Foundations of Education | 3 | 0 | 3 |
| EN | 101 | English Composition | 4 | 0 | 4 |
| MT | 120 | Contemporary College Math ***or*** | | | |
| MT | 123 | Intermediate Algebra | 4 | 0 | 4 |
| PY | 105 | Introduction to Psychology | 3 | 0 | 3 |
| | | | | | 17 |

| SPRING SEMESTER | | | | | |
|---|---|---|---|---|---|
| # ED | 200 | Supporting Student with Challenging Behaviors | 4 | 0 | 4 |
| # ED | 207 | Teaching and Learning Process | 3 | 0 | 3 |
| IT | 102 | PC Applications | 3 | 0 | 3 |
| PY | 209 | Educational Psychology | 3 | 0 | 3 |
| PY | 220 | Human Growth and Development: The Life Span | 3 | 0 | 3 |
| | | | | | 16 |

## NHTI Faculty Profile

**Ellen Dokton**

*Professor of Education*

B.A., Goddard College
M.A., New York University

Professor Dokton previously served as Coordinator of Disabilities Services at NHTI. Most recently, she developed the Education Department and co-developed the Associate in Science in Education program.

*"Our Department of Education, Associate in Science in Education program offers pre-service teachers and paraeducators courses and hands-on learning experiences that are designed to prepare them to work with diverse student populations."*

## SECOND YEAR

| FALL SEMESTER | | | CL | LAB | CR |
|---|---|---|---|---|---|
| # ED | 201 | Legal Issues in Education | 3 | 0 | 3 |
| # ED | 203 | Teaching Strategies for Diverse Learners | 3 | 0 | 3 |
| EN | xxx | English Elective | 3 | 0 | 3 |
| SO | 105 | Introduction to Sociology | 3 | 0 | 3 |
| XX | xxx | Lab Science Elective* | 3 | 2 | 4 |
| | | | | | 16 |

| SPRING SEMESTER | | | | | |
|---|---|---|---|---|---|
| # ED | 204 | Instructional Technology | 3 | 0 | 3 |
| # ED | 212 | Design of Instruction | 3 | 0 | 3 |
| # ED | 220 | Field Experience in Education | 1 | 6 | 3 |
| XX | xxx | Humanities/Fine Arts/Foreign Language Elective | 3 | 0 | 3 |
| XX | xxx | General Elective | 3 | 0 | 3 |
| | | | | | 15 |
| | | **TOTAL CREDITS** | | | **64** |

\# *Indicates major field courses*

* *Any lab science course with a prefix of BI, CH, or PH except BI 100, CH 100 and PH 100*

## Specific Admission Requirements

1. Algebra I with a grade of "C" or higher or NHTI's MT 103 and MT 104 both with grades of "C" or higher;
2. Strong verbal and written English language skills are major considerations for acceptance;
3. Personal interview with Department Head and/or faculty member may be required;
4. Credit for experiential learning, workshops and/or college courses taken at other institutions is available; students interested in receiving credit must supply appropriate documentation and meet with the Director of Admissions and the Department Head;
5. Students interested in matriculation in a baccalaureate teacher preparation program after completion of the Associate Degree are responsible for researching the requirements of such programs and their transfer procedures.

***Health, Character and Technical Standards, see page 30.***

Though this curriculum is designed to be completed in the format listed, students may choose to take more time, depending on their individual circumstances. Students who anticipate taking more time to complete the program are *strongly encouraged to consult with their department head* at the time of registration each semester to ensure that prerequisite requirements are met and course selection is appropriate.

# Health, Character and Technical Standards for Education Programs

The college must ensure that patients/clients/children are not placed in jeopardy by students during learning experiences. Therefore, students in practica, service learning and clinical experiences must demonstrate sufficient emotional stability to withstand the stresses, uncertainties and changing circumstances that characterize patient/client/child care responsibilities. Furthermore, the student is expected to have the emotional stability required to exercise sound judgment, accept direction and guidance from a supervisor or faculty member and establish rapport and maintain sensitive interpersonal relationships with employees, customers and/or patients/clients/children and their families.



# Early Childhood Education *(see Program page 27)*

**Health Considerations**

Candidates for positions and careers in early childhood education are encouraged to explore health requirements associated with employment in child care, preschool and related settings for young children. Prospective students with special needs requiring accommodations that may affect their practicum placement and/or potential employment prospects are advised to discuss specific career goals with the department head during the admissions process.

**Character Expectations**

The health and safety of young children is of paramount concern to the Department of Early Childhood Education. Applicants for positions in childcare, preschools and many other early childhood programs in New Hampshire should be aware that background checks through the New Hampshire Department of Safety must be completed by potential employers prior to employment.

Applicants who have been in difficulty with the law, depending upon the nature of the problem, may not be employable or even eligible for practica. Applicants are advised that such matters will be discussed during the admissions interview, so that future goals will not be compromised.

**Technical Standards**

Technical Standards have been established to provide guidance to students as to skills and abilities required to function successfully in the program and ultimately in the Early Childhood Education profession. Applicants who feel they may not be able to meet one or more of the technical standards should contact department faculty to discuss individual cases. The Department of Early Childhood Education will seriously consider all academically qualified candidates providing that the technical standards can be met with reasonable accommodations.

Students in Early Childhood Education must have sufficient strength, stamina, and motor coordination to perform the following:

- Standing for sustained periods of time, walking, running, bending, sitting on the floor and on child-size furniture to meet children's needs and accomplish tasks;
- Frequent lifting, moving and transferring children, especially infants and toddlers;
- Sufficient visual and hearing acuity to ensure a safe environment; and ability to respond quickly in the event of emergency;
- Sufficient verbal ability to express and exchange information and ideas as well as to interpret important instructions to children, colleagues, and parents; and sufficient writing skills to accurately record children's daily progress and milestones as well as medications administered, accident and suspected child abuse reports, etc.;
- Ability to work with frequent interruptions, to respond appropriately to unexpected situations; and to cope with extreme variations in workload and stress levels.

# Education

## (Associate in Arts and Associate in Science)

*(see Program page 28 & 29)*

**Health Considerations**

Candidates for positions and careers in education are encouraged to explore health requirements associated with employment in a school setting. Prospective students with special needs requiring accommodations that may affect their learning are encouraged to contact the Disabilities Services Coordinator at (603)271-7723 TTY and Voice.

**Character Expectations**

The health and safety of children, adolescents and other learners is of paramount concern to the Education program. Applicants for teaching positions in public and private schools in New Hampshire should be aware that background checks through the New Hampshire Department of Safety must be completed by potential employers prior to employment.

Applicants who have been in difficulty with the law, depending upon the nature of their experience, may not be employable or even eligible for field experience. Applicants are advised that such matters may be discussed during an admission interview so that future goals to be a teacher will not be compromised.

**Technical Standards**

Technical Standards have been established to provide guidance to students as to skills and abilities required to function successfully in the program and ultimately in the public and/or private school classroom as teachers. Applicants who think they may not be able to meet one or more of the technical standards should contact program faculty members to discuss individual cases. Department Faculty will give serious consideration to all academically qualified candidates providing that the technical standards can be met with reasonable accommodations. Students in the Education program must have sufficient strength, stamina and motor coordination to perform the following:

- Sufficient hearing and visual acuity to ensure a safe environment and ability to respond quickly in the event of emergency;
- Sufficient verbal ability to express and exchange information and ideas as well as to interpret important instructions to children, adolescents, colleagues, and parents;
- Sufficient writing skills to accurately record students' daily progress and milestones as well as a variety of reports;
- Ability to work with frequent interruptions, to respond appropriately to unexpected situations, and to cope with extreme variations in workload and stress levels.

# ENGINEERING TECHNOLOGY

## Architectural Engineering Technology

The AET program combines architecture and engineering theory with a solid foundation in mathematics and science. Students in the program study the architectural design process of a variety of building types and develop skills in sketching and computer aided drawing. Students learn structural and environmental systems theory, methods of construction, statics and strength of building materials, surveying and professional practices. *A 3-year version of this program is available. Contact the Department Head for details.*

The degree of Associate in Engineering Technology with a major in Architectural Engineering Technology is awarded upon successful completion of the program. Graduates of the program are employed with architectural and engineering firms, contractors, surveyors, and in various governmental agencies. This program is accredited by the Technology Accreditation Commission/Accreditation Board for Engineering and Technology, Inc. (TAC/ABET), 111 Market Place, Suite 1050, Baltimore, MD 21202—Telephone (410) 347-7700.

NHTI has transfer affiliations with four year institutions including:

- Boston Architectural Center
- Roger Williams University

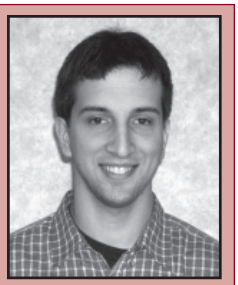
Please refer to *page 83* for suggestions on transferring to other institutions. *(Credits earned in Engineering Technology at NHTI are fully transferable to all TAC/ABET accredited BS of Engineering Technology programs.)*

### FIRST YEAR

| FALL SEMESTER | | | CL | LAB | CR |
|---|---|---|---|---|---|
| # AR | 103 | Architectural Graphics and Sketching | 2 | 2 | 3 |
| # AR | 120 | Materials and Methods of Construction | 4 | 0 | 4 |
| MT | 133 | Elementary Functions | 5 | 0 | 5 |
| PH | 133 | Physics I | 3 | 2 | 4 |
| | | | | | 16 |

| SPRING SEMESTER | | | | | |
|---|---|---|---|---|---|
| # AR | 104 | Architectural Design Studio I | 2 | 2 | 3 |
| # AR | 150 | Statics and Strength of Materials | 3 | 2 | 4 |
| EN | 101 | English Composition | 4 | 0 | 4 |
| MT | 134 | Pre-Calculus | 4 | 0 | 4 |
| IT | 102 | PC Applications | 3 | 0 | 3 |
| | | | | | 18 |

### NHTI Alumni Profile



**Keith Carlson**
Class of 2004
**Major:** Architectural Engineering Technology

*"NHTI immediately stood out in my search for schools, with its small classes, low tuition, and the integration of design, technology, and digital media. I gained valuable insight on design techniques and construction technology, and the professors encouraged me to explore new technologies, as well as innovative methods of presentation and visualization. I am continuing my architectural education at Roger Williams University and I feel that the AET program at NHTI provided me with a foundation that will greatly benefit my remaining college career and the years to follow."*

### SECOND YEAR

#### ARCHITECTURAL ENGINEERING TECHNOLOGY OPTION

| FALL SEMESTER | | | CL | LAB | CR |
|---|---|---|---|---|---|
| # AR | 202 | Architectural Design Studio II | 2 | 2 | 3 |
| # CV | 220 | Surveying | 2 | 3 | 3 |
| # CV | 240 | Timber and Steel Design | 3 | 2 | 4 |
| EN | 125 | Communication and the Literature of Science and Technology | 3 | 0 | 3 |
| PH | 135 | Physics II | 2 | 2 | 3 |
| XX | xxx | Humanities/Fine Arts/ Foreign Language Elective | 3-4 | 0 | 3-4 |
| | | | | | 19-20 |

| SPRING SEMESTER | | | | | |
|---|---|---|---|---|---|
| # CV | 235 | Reinforced Concrete Design | 2 | 3 | 3 |
| # AR | 250 | Environmental Systems | 3 | 0 | 3 |
| # AR | 270 | Construction Management | 3 | 0 | 3 |
| # AR | 297 | Architectural Design Studio III | 2 | 2 | 3 |
| SO | xxx | Social Science Elective* | 3-4 | 0 | 3-4 |
| | | | | | 15-16 |
| | | **Total Credits** | | | **68-70** |

#### CIVIL ENGINEERING TECHNOLOGY OPTION

| FALL SEMESTER | | | | | |
|---|---|---|---|---|---|
| # CV | 220 | Surveying | 2 | 3 | 3 |
| # CV | 240 | Timber and Steel Design | 3 | 2 | 4 |
| # CV | 201 | Civil CADD | 2 | 2 | 3 |
| EN | 125 | Communication and the Literature of Science and Technology | 3 | 0 | 3 |
| PH | 135 | Physics II | 2 | 2 | 3 |
| XX | xxx | Humanities/Fine Arts/ Foreign Language Elective | 3-4 | 0 | 3-4 |
| | | | | | 19-20 |

| SPRING SEMESTER | | | | | |
|---|---|---|---|---|---|
| # AR | 270 | Construction Management | 3 | 0 | 3 |
| # CV | 297 | Highway Design | 3 | 2 | 4 |
| # CV | 235 | Reinforced Concrete Design | 2 | 3 | 3 |
| # MT | 205 | Calculus I | 4 | 0 | 4 |
| SO | xxx | Social Science Elective* | 3 | 0 | 3-4 |
| | | | | | 17-18 |
| | | **Total Credits** | | | **70-72** |

*# Indicates major field courses.*
** Any course with a prefix of AN, EO HI, PS, PY or SO.*

### Specific Admission Requirements

1. At least three years of college preparatory mathematics (Algebra I, Algebra II and Geometry) with minimum grades of "C";
2. It is strongly recommended that all architectural engineering technology applicants have satisfactorily completed a high school level course in physics.

Though this curriculum is designed to be completed in the format listed, students may choose to take more time, depending on their individual circumstances. Students who anticipate taking more time to complete the program are *strongly encouraged to consult with their department head* at the time of registration each semester to ensure that prerequisite requirements are met and course selection is appropriate.

# Broadband Networking & Communications Technology (BNCT)

The Broadband Networking and Communications Technology program provides degree candidates with both academic and technical learning experience relevant to the high speed communications field. It is designed to prepare graduates to enter various areas of the telecommunications field or continue their studies toward advanced degrees. The degree of Associate in Science with a major in Broadband Networking and Communications Technology will be awarded upon successful completion of the program. *A 3-year version of this program is available. Contact the Department Head for details.*

The curriculum includes fundamental courses in electronics and advanced courses in broadband communication networks with emphasis in fiber optics, coaxial cables, microwave, antennas and satellite telecommunication systems. Voice, data and video communications concepts and techniques are covered throughout the curriculum.

Various career opportunities are available to those who choose to become Broadband Networking & Communications technologists. The graduates of this program secure positions as Telecommunications Technologist, Communications/Control Technologist, Telecommunications Engineering aide, Fiber Optics Technologist, or Telecommunications Engineering Technologist.

Those graduates who have maintained the appropriate GPA are eligible for entrance into the third year of study toward a Bachelor of Science in Engineering Technology degree at the University of New Hampshire in Manchester ***(dual admission program)***.



## FIRST YEAR

| FALL SEMESTER | | | CL | LAB | CR |
|---|---|---|---|---|---|
| # BN | 101 | Introduction to Broadband Technology | 3 | 0 | 3 |
| # EL | 101 | Electric Circuits | 3 | 3 | 4 |
| # EL | 115 | Digital Fundamentals | 2 | 3 | 3 |
| EN | 101 | English Composition | 4 | 0 | 4 |
| MT | 133 | Elementary Functions | 5 | 0 | 5 |
| | | | | | 19 |
| **SPRING SEMESTER** | | | | | |
| # BN | 102 | RF Signal Analysis | 3 | 3 | 4 |
| # BN | 110 | Instrumentation Laboratory | 1 | 4 | 3 |
| # EL | 110 | Electronics I | 3 | 3 | 4 |
| MT | 134 | Pre-Calculus | 4 | 0 | 4 |
| PH | 133 | Physics I | 3 | 2 | 4 |
| | | | | | 19 |

## SECOND YEAR

| FALL SEMESTER | | | CL | LAB | CR |
|---|---|---|---|---|---|
| # BN | 201 | Fiber Optics and Transmission Lines | 3 | 3 | 4 |
| # EL | 210 | Electronics II | 3 | 3 | 4 |
| EN | 125 | Communications and the Literature of Science and Technology | 3 | 0 | 3 |
| MT | 205 | Calculus I | 4 | 0 | 4 |
| XX | xxx | Social Science Elective* | 3 | 0 | 3 |
| | | | | | 18 |
| **SPRING SEMESTER** | | | | | |
| # BN | 206 | Analog and Digital Communication Systems | 3 | 3 | 4 |
| # BN | 240 | Data and Internet Communications | 3 | 3 | 4 |
| # BN | 306 | Senior Project ***or*** | 1 | 5 | 3 |
| # BN | 307 | Broadband Internship | 1 | 6 | 3 |
| XX | xxx | Humanities/Fine Arts/ Foreign Language Elective | 3 | 0 | 3 |
| | | | | | 14 |
| | | **TOTAL CREDITS** | | | **70** |

\# *Indicates Major field courses*
* *Any course with a prefix AN, EO, HI, PS, PY, or SO*

***Note:*** *CP 107 is recommended for those students planning to further their education.*

## NHTI Alumni Profile

**Mike Ritsema**
Class of 2005 – High Honors
**Major:** Broadband Networking & Communications Technology

*"NHTI prepared me very well for a career in the emerging world of fiber optics and broadband communications. Every instructor at NHTI gives students as much individual time as necessary to ensure success. Now, I've transferred all my NHTI credits toward my Bachelor's Degree at UNH-Manchester under the dual admission program. I recommend NHTI to anyone interested in the high speed communications field."*

## Specific Admission Requirements

1. Completion of high school Algebra I & II with grades of "C" or higher ***or*** NHTI's MT 108 and MT 109 both with grades of "C" or higher;
2. Basic skills in written English and reading comprehension are required;
3. High school Physics, Geometry and Chemistry are recommended.

**Internship Considerations**

The college must ensure that individuals (customers, employees, etc.) at internship and service learning sites are not adversely affected by students during learning experiences. Therefore, students participating in internship and field experiences must demonstrate the emotional stability required to exercise sound judgment, accept direction and guidance from a supervisor or faculty member and establish rapport and maintain sensitive interpersonal relationships with employees, customers and clients.

Though this curriculum is designed to be completed in the format listed, students may choose to take more time, depending on their individual circumstances. Students who anticipate taking more time to complete the program are *strongly encouraged to consult with their department head* at the time of registration each semester to ensure that prerequisite requirements are met and course selection is appropriate.

# Computer Engineering Technology

The Computer Engineering Technology program provides degree candidates with both academic and technical learning experience relevant to the hardware and software systems currently used in industry. Computer engineering technologists work with professional engineers, scientists, medical doctors, business professionals, and manufacturing managers in setting up various computer platforms, installing software packages, and programming, troubleshooting and/or interfacing computers with various types of equipment. The curriculum also includes microprocessor technology, fundamentals of electronics, personal computer architecture, windows applications programming and a computer project. *A 3-year version of this program is available. Contact the Department Head for details.* The degree of Associate in Engineering Technology with a major in Computer Engineering Technology will be awarded upon successful completion of all program requirements.

Graduates secure positions as computer programmers in C++ Object Oriented Programming, Java, Visual C++, Visual Basic, assembly language and real-time Relay Ladder Logic. Other positions that graduates have attained are network or systems administrators, web site developers, and hardware and software troubleshooters. This program is accredited by the Technology Accreditation Commission/Accreditation Board for Engineering and Technology, Inc. (TAC/ABET), 111 Market Place, Suite 1050, Baltimore, MD 21202—Telephone (410) 347-7700, and upon graduation, some may choose to further their education in the fields of Computer Engineering Technology, or Computer Science with high degrees of transferability to major colleges and universities throughout the country.

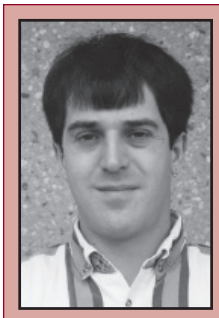
NHTI has transfer affiliations with four year institutions including:

- Northeastern University School of Engineering
- University of Massachusetts-Lowell
- UNH Manchester ***(dual admission program)***
- Wentworth Institute of Technology

Please refer to *page 83* for suggestions on transferring to other institutions. *(Credits earned in Engineering Technology at NHTI are fully transferable to all TAC/ABET accredited BS of Engineering Technology programs.)*

### Internship Considerations

The college must ensure that individuals (customers, employees, etc.) at internship and service learning sites are not adversely affected by students during learning experiences. Therefore, students participating in internship and field experiences must demonstrate the emotional stability required to exercise sound judgment, accept direction and guidance from a supervisor or faculty member and establish rapport and maintain sensitive interpersonal relationships with employees, customers and clients.



## NHTI Alumni Profile

**Leon Kenison**
Class of 1998
**Major:** Computer Engineering Technology

Leon started as a part-time evening student at NHTI in the fall of 1993. He later became a full-time student, graduating in 1998. His senior computer project won rave reviews from Dumont Associates. Leon had several career opportunities to consider after graduation, but opted to seek a bachelor's degree in Computer Science at UMass-Lowell.

*"The NHTI professors inspired me to achieve my goals and more. Their expertise, professional passion, and personal involvement helped launch me toward a rewarding career in a field I'm very excited about."*

## FIRST YEAR

| FALL SEMESTER | | | CL | LAB | CR |
|---|---|---|---|---|---|
| # CP | 107 | Introduction to Programming with C++ | 2 | 3 | 3 |
| # EL | 101 | Electric Circuits | 3 | 3 | 4 |
| # EL | 115 | Digital Fundamentals | 2 | 3 | 3 |
| EN | 101 | English Composition | 4 | 0 | 4 |
| MT | 133 | Elementary Functions | 5 | 0 | 5 |
| | | | | | 19 |
| **SPRING SEMESTER** | | | | | |
| # CP | 112 | Machine and Assembly Language | 3 | 3 | 4 |
| # CP | 215 | Integrated Circuits and Interfacing | 3 | 3 | 4 |
| EN | 125 | Communication and the Literature of Science and Technology | 3 | 0 | 3 |
| MT | 134 | Pre-Calculus | 4 | 0 | 4 |
| PH | 133 | Physics I | 3 | 2 | 4 |
| | | | | | 19 |

## SECOND YEAR

| FALL SEMESTER | | | | | |
|---|---|---|---|---|---|
| # CP | 235 | Algorithms with Object Oriented Programming | 3 | 3 | 4 |
| # CP | 260 | Computer Real Time Interfacing | 3 | 3 | 4 |
| # CP | 301 | Computer Project Definition | 1 | 0 | 1 |
| MT | 205 | Calculus I | 4 | 0 | 4 |
| PH | 202 | Physics IIa (1st 7.5 weeks) | 3 | 2 | 2 |
| XX | xxx | Social Science Elective* | 3-4 | 0 | 3-4 |
| | | | | | 18-19 |
| **SPRING SEMESTER** | | | | | |
| # CP | 222 | Data Communications | 3 | 3 | 4 |
| # CP | 240 | Programming for Windows Operating Systems | 3 | 3 | 4 |
| # CP | 252 | Networking and Internet Technologies | 3 | 3 | 4 |
| # CP | 303 | Computer Project | 1 | 4 | 3 |
| XX | xxx | Humanities/Fine Arts/Foreign Language Elective | 3 | 0 | 3 |
| | | | | | 18 |
| | | **TOTAL CREDITS** | | | **74-75** |

***Please Note:*** *MT 206 is an additional course recommended for those students planning to further their education.*

\# *Indicates major field courses.*
* *Any course with a prefix of AN, EO, HI, PS, PY or SO.*

## Specific Admission Requirements

1. At least three years of college preparatory mathematics (Algebra I, Algebra II and Geometry) with minimum grades of "C";
2. It is strongly recommended that all engineering technology applicants have satisfactorily completed high school level courses in chemistry and physics.

Though this curriculum is designed to be completed in the format listed, students may choose to take more time, depending on their individual circumstances. Students who anticipate taking more time to complete the program are *strongly encouraged to consult with their department head* at the time of registration each semester to ensure that prerequisite requirements are met and course selection is appropriate.

# Electronic Engineering Technology

The Electronic Engineering Technology program provides a balance of theory and practical applications to prepare degree candidates to enter the various areas of the electronics field or continue their studies toward advanced degrees. The program is accredited by the Technology Accreditation Commission/Accreditation Board for Engineering and Technology, Inc. (TAC/ABET), 111 Market Place, Suite 1050, Baltimore, MD 21202—Telephone (410) 347-7700.

The curriculum includes fundamental courses in circuit analysis, linear and digital electronics and programming in the C++ language. Advanced courses incorporate fundamental concepts in practical applications with emphasis on systems analysis, design and implementation. Advanced areas of study include machine and assembly language programming applications with embedded microsystems, communications and electronic fabrication utilizing computer aided design (CAD) and engineering design automations (EDA) tools. Students complete the program by applying their technical knowledge in a design project course. The degree of Associate in Engineering Technology with a major in Electronic Engineering Technology will be awarded upon successful completion of the program. *A 3-year version of this program is available. Contact the Department Head for details.*

Graduates secure positions in technical fields such as manufacturing, microelectronics, automation and telecommunications. The program also provides the first two years of study towards a Bachelor of Science in Engineering Technology at TAC/ABET accredited colleges and universities or students may continue in other degree programs at other colleges and universities.

NHTI has transfer affiliations with four year institutions including:

- Northeastern University School of Engineering
- University of Massachusetts-Lowell
- UNH Manchester ***(dual admission program)***
- Wentworth Institute of Technology

Please refer to *page 83* for suggestions on transferring to other institutions. *(Credits earned in Engineering Technology at NHTI are fully transferable to all TAC/ABET accredited BS of Engineering Technology programs.)*

## NHTI Alumni Profile

**Joel Wright**
Class of 1990
**Major:** Electronic Engineering Technology

**Currently:** InfoServe Corporation

Joel graduated from the NHTI electronic engineering technology program and continued his engineering technology education at the University of NH. Before joining InfoServe in 1994, Joel worked at Cabletron and at the Mt. Washington Observatory. He is responsible for the operation of a growing company that supplies high-end, purpose-built computer systems and field service, consulting, and training for those systems to northern NE business and industry.

*"The background I gained at NHTI was a tremendous boost to my career. I especially benefitted from the early exposure to hands-on work in the electronics labs."*

**FIRST YEAR**

| FALL SEMESTER | | | CL | LAB | CR |
|---|---|---|---|---|---|
| # CP | 107 | Introduction to Programming with C++ | 2 | 3 | 3 |
| # EL | 101 | Electric Circuits | 3 | 3 | 4 |
| # EL | 115 | Digital Fundamentals | 2 | 3 | 3 |
| EN | 101 | English Composition | 4 | 0 | 4 |
| MT | 133 | Elementary Functions | 5 | 0 | 5 |
| | | | | | 19 |

| SPRING SEMESTER | | | | | |
|---|---|---|---|---|---|
| # EL | 110 | Electronics I | 3 | 3 | 4 |
| # EL | 144 | Embedded Microsystems | 3 | 3 | 4 |
| EN | 125 | Communication and the Literature of Science and Technology | 3 | 0 | 3 |
| MT | 134 | Pre-Calculus | 4 | 0 | 4 |
| PH | 133 | Physics I | 3 | 2 | 4 |
| | | | | | 19 |

**SECOND YEAR**

| FALL SEMESTER | | | | | |
|---|---|---|---|---|---|
| # EL | 102 | Circuit Analysis | 3 | 3 | 4 |
| # EL | 210 | Electronics II | 3 | 3 | 4 |
| # EL | 305 | Design Project Preparation | 1 | 5 | 3 |
| MT | 205 | Calculus I | 4 | 0 | 4 |
| PH | 202 | Physics IIa (1st 7.5 weeks) | 3 | 2 | 2 |
| | | | | | 17 |

| SPRING SEMESTER | | | | | |
|---|---|---|---|---|---|
| # EL | 215 | Advanced Digital Electronics | 3 | 3 | 4 |
| # EL | 251 | Advanced Topics in Electronics | 3 | 3 | 4 |
| # EL | 306 | Senior Design Project | 2 | 5 | 4 |
| XX | xxx | Humanities/Fine Arts/Foreign Language Elective | 3 | 0 | 3 |
| XX | xxx | Social Science Elective* | 3-4 | 0 | 3-4 |
| | | | | | 18-19 |
| | | **TOTAL CREDITS** | | | **73-74** |

***Please Note:*** *BN 102 can be substituted for EL 102; MT 206 is an additional course recommended for those students planning to further their education.*

*# Indicates major field courses.*
** Any course with a prefix of AN, EO, HI, PS, PY, or SO.*

## Specific Admission Requirements

1. At least three years of college preparatory mathematics (Algebra I, Algebra II and Geometry) with minimum grades of "C";
2. It is strongly recommended that all engineering technology applicants have satisfactorily completed high school level courses in chemistry and physics.

Though this curriculum is designed to be completed in the format listed, students may choose to take more time, depending on their individual circumstances. Students who anticipate taking more time to complete the program are *strongly encouraged to consult with their department head* at the time of registration each semester to ensure that prerequisite requirements are met and course selection is appropriate.

# Manufacturing Engineering Technology

The Manufacturing Engineering Technology program is designed to educate technicians in the manufacturing field. The program emphasizes mathematics and science courses to give students the knowledge to cope with changing technology. Course work incorporates the theory and practice of manufacturing from planning and layout through the operation and control phases. Extensive computer applications are part of the program including computer-aided drafting and a computer-integrated manufacturing facility with two industrial robots. English and social sciences are taught as part of the program to broaden the student's perspective and improve communication skills.

The degree of Associate in Engineering Technology with a major in Manufacturing Engineering Technology is awarded upon successful completion of the program. Graduates are employed in positions such as production planners, management assistants, material planners, and manufacturing engineering technicians. *A 3-year version of this program is available. Contact the Department Head for details.*

Those graduates who have maintained the appropriate GPA are eligible for entrance into the third year of study toward a Bachelor of Science in Engineering Technology degree at the University of New Hampshire in Manchester ***(dual admission program)***, and at other colleges and universities. This program is accredited by the Technology Accreditation Commission/Accreditation Board for Engineering and Technology, Inc. (TAC/ABET), 111 Market Place, Suite 1050, Baltimore, MD 21202—Telephone (410) 347-7700. Please refer to *page 83* for suggestions on transferring to other institutions.

## FIRST YEAR

| FALL SEMESTER | | | CL | LAB | CR |
|---|---|---|---|---|---|
| EN | 101 | English Composition | 4 | 0 | 4 |
| # MC | 101 | Design Graphics I | 1 | 3 | 2 |
| # MF | 111 | Manufacturing and Materials Processing | 3 | 2 | 4 |
| MT | 133 | Elementary Functions | 5 | 0 | 5 |
| PH | 133 | Physics I | 3 | 2 | 4 |
| | | | | | 19 |

| SPRING SEMESTER | | | | | |
|---|---|---|---|---|---|
| EN | 120 | Communications OR | | | |
| EN | 125 | Communications and the Literature of Science and Technology | 3 | 0 | 3 |
| IT | 102 | PC Applications | 3 | 0 | 3 |
| # MC | 102 | Design Graphics II | 1 | 3 | 2 |
| # MC | 150 | Statics and Strength of Materials | 3 | 2 | 4 |
| MT | 134 | Pre-Calculus | 4 | 0 | 4 |
| PH | 135 | Physics II | 2 | 2 | 3 |
| | | | | | 19 |

## SECOND YEAR

| FALL SEMESTER | | | | | |
|---|---|---|---|---|---|
| CH | 105 | Chemistry | 3 | 2 | 4 |
| # MF | 202 | Measurement and Control | 3 | 2 | 4 |
| # MF | 220 | Manufacturing Processes and Machine Tools | 3 | 3 | 4 |
| MT | 205 | Calculus I | 4 | 0 | 4 |
| XX | xxx | Social Science Elective* | 3-4 | 0 | 3-4 |
| | | | | | 19-20 |

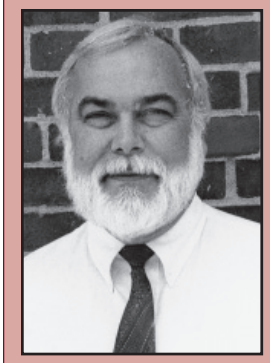
| SPRING SEMESTER | | | | | |
|---|---|---|---|---|---|
| # MF | 241 | Computer Integrated Manufacturing (CIM) | 3 | 3 | 4 |
| # MF | 230 | Production Systems | 3 | 2 | 4 |
| # MF | 252 | Quality Control | 3 | 2 | 4 |
| XX | xxx | Humanities/Fine Arts/ Foreign Language Elective | 3-4 | 0 | 3-4 |
| | | | | | 15-16 |
| | | **TOTAL CREDITS** | | | **72-74** |

\# *Indicates major field courses.*

* *Any course with a prefix of AN, EO, HI, PS, PY or SO.*

## Specific Admission Requirements

1. At least three years of college preparatory mathematics (Algebra I, Algebra II and Geometry) with minimum grades of "C";
2. It is strongly recommended that all engineering technology applicants have satisfactorily completed high school level courses in chemistry and physics.



## NHTI Faculty Profile

**Meurig T. Davies**
*Professor, Manufacturing Engineering Technology*

B.S. University of Wales, Cardiff
M.S. University of Birmingham, England

Before joining the NHTI faculty in 1988, Professor Davies spent 25 years in industry and was a vice-president and general manager for one of the world's largest shipbuilding companies. He's also worked for Rolls Royce, Boeing Aircraft, Ford and General Motors.

*"When I arrived here I was immediately impressed with NHTI's Computer Integrated Manufacturing Laboratory, the equal of which can be found at very few universities. But I was even more impressed by the wonderful rapport which exists between students and faculty here."*

Though this curriculum is designed to be completed in the format listed, students may choose to take more time, depending on their individual circumstances. Students who anticipate taking more time to complete the program are *strongly encouraged to consult with their department head* at the time of registration each semester to ensure that prerequisite requirements are met and course selection is appropriate.

# Mechanical Engineering Technology

The Mechanical Engineering Technology program is designed to educate technicians in the mechanical engineering field. The program includes courses in the areas of design, manufacturing and controls. Mathematics and physical sciences are emphasized to give students the basic knowledge to cope with changing technology. Course work incorporates theory and practice along with extensive computer application in drafting and design. English and social science courses are taught as part of the program to broaden and improve communication skills.

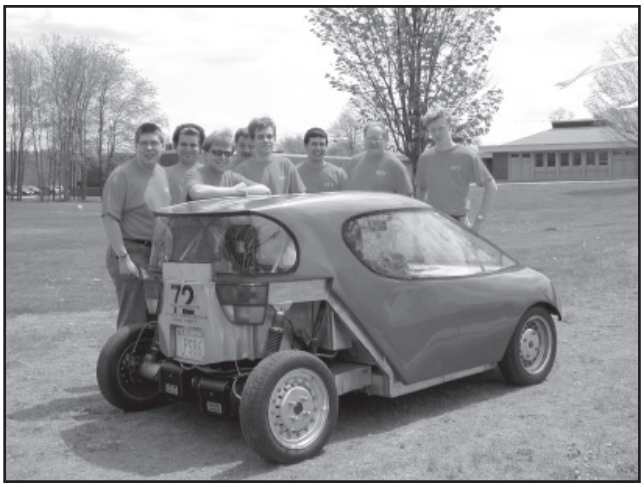
The degree of Associate in Engineering Technology with a major in Mechanical Engineering Technology is awarded upon successful completion of the program. Graduates are employed in positions such as assistant engineer, machine designer, engineering sales representative, engineering laboratory technician, technical supervisor and CAD operator. *A 3-year version of this program is available. Contact the Department Head for details.*

Those graduates who have maintained the appropriate GPA are eligible for entrance into the third year of study toward a Bachelor of Science in Engineering Technology degree at the University of New Hampshire, and other colleges and universities. This program is accredited by the Technology Accreditation Commission/Accreditation Board for Engineering and Technology, Inc. (TAC/ABET), 111 Market Place, Suite 1050, Baltimore, MD 21202—Telephone (410) 347-7700.

NHTI has transfer affiliations with four year institutions including:

- UNH Manchester ***(dual admission program)***
- Wentworth Institute of Technology

Please refer to *page 83* for suggestions on transferring to other institutions. *(Credits earned in Engineering Technology at NHTI are fully transferable to all TAC/ABET accredited BS of Engineering Technology programs.)*



***Sustainable Energy Ventures Club***

## FIRST YEAR

| FALL SEMESTER | | | CL | LAB | CR |
|---|---|---|---|---|---|
| EN | 101 | English Composition | 4 | 0 | 4 |
| # MC | 101 | Design Graphics I | 1 | 3 | 2 |
| # MF | 111 | Manufacturing and Materials Processing | 3 | 2 | 4 |
| MT | 133 | Elementary Functions | 5 | 0 | 5 |
| PH | 133 | Physics I | 3 | 2 | 4 |
| | | | | | 19 |

| SPRING SEMESTER | | | | | |
|---|---|---|---|---|---|
| EN | 120 | Communications ***or*** | | | |
| EN | 125 | Communications and the Literature of Science and Technology | 3 | 0 | 3 |
| IT | 102 | PC Applications | 3 | 0 | 3 |
| # MC | 102 | Design Graphics II | 1 | 3 | 2 |
| # MC | 150 | Statics and Strength of Materials | 3 | 2 | 4 |
| MT | 134 | Pre-Calculus | 4 | 0 | 4 |
| PH | 135 | Physics II | 2 | 2 | 3 |
| | | | | | 19 |

## SECOND YEAR

| FALL SEMESTER | | | CL | LAB | CR |
|---|---|---|---|---|---|
| CH | 105 | Chemistry | 3 | 2 | 4 |
| # MC | 250 | Dynamics and Mechanical Design I | 3 | 2 | 4 |
| # MF | 202 | Measurement and Control | 3 | 2 | 4 |
| MT | 205 | Calculus I | 4 | 0 | 4 |
| XX | xxx | Social Science Elective* | 3-4 | 0 | 3-4 |
| | | | | | 19-20 |

| SPRING SEMESTER | | | | | |
|---|---|---|---|---|---|
| # MC | 205 | Material Science | 3 | 2 | 4 |
| # MC | 228 | Introduction to the Thermal Sciences | 4 | 0 | 4 |
| # MC | 260 | Mechanical Design II | 3 | 2 | 4 |
| XX | xxx | Humanities/Fine Arts/ Foreign Language Elective | 3-4 | 0 | 3-4 |
| | | | | | 15-16 |
| | | **TOTAL CREDITS** | | | **72-74** |

\# *Indicates major field courses.*
* *Any course with a prefix of AN, EO, HI, PS, PY or SO.*

## Specific Admission Requirements

1. At least three years of college preparatory mathematics (Algebra I, Algebra II and Geometry) with minimum grades of "C";
2. It is strongly recommended that all engineering technology applicants have satisfactorily completed high school level courses in chemistry and physics.

Though this curriculum is designed to be completed in the format listed, students may choose to take more time, depending on their individual circumstances. Students who anticipate taking more time to complete the program are *strongly encouraged to consult with their department head* at the time of registration each semester to ensure that prerequisite requirements are met and course selection is appropriate.

# HEALTH PROGRAMS

## Dental Assisting

The Allied Dental Education - Dental Assisting Program provides the education for employment as a dental assistant. The dental assistant must possess knowledge of procedures and practices in patient care, laboratory work, and office management. The one-year Dental Assisting Program emphasizes clinical training in the campus clinic and in private dental offices. A Diploma in Dental Assisting is awarded following successful completion of the program. Graduates are able to find employment as Dental Assistants in private practices or in institutions. They may also apply for admission into the Health Sciences Program and, with an additional year of study, receive degrees of Associate in Science with majors in Health Science.

| | | CL | LAB | CR |
|---|---|---|---|---|
| **FALL SEMESTER** | | | | |
| # DN 110 | Dental Assisting Science I | 3 | 0 | 3 |
| # DN 105 | Dental Radiology for Dental Assisting | 2 | 3 | 3 |
| # DN 161 | Dental Materials - Dental Assisting | 2 | 3 | 3 |
| # DN 175 | Dental Assisting Theory I | 2 | 0 | 2 |
| # DN 191 | Dental Assisting Clinical Experience I | 0 | 4 | 1 |
| EN 100 | Introductory English ***or*** | | | |
| EN 101 | English Composition | 4 | 0 | 4 |
| PY 105 | Introduction to Psychology | 3 | 0 | 3 |
| | | | | 19 |
| **SPRING SEMESTER** | | | | |
| # DN 111 | Dental Assisting Science II | 2 | 0 | 2 |
| # DN 155 | Oral Hygiene Education/Nutrition | 2 | 0 | 2 |
| # DN 182 | Office Procedures and Management with Computer Applications | 1 | 0 | 1 |
| # DN 196 | Dental Assisting Clinical Experience II | 0 | 15 | 5 |
| # DN 239 | Medical Emergencies for Dental Assisting | 2 | 0 | 2 |
| # DN 275 | Dental Assisting Theory II | 1 | 2 | 2 |
| EN 101 | English Composition ***or*** | | | |
| EN 120 | Communications | 3-4 | 0 | 3-4 |
| | | | | 17-18 |
| **SUMMER SEMESTER** | | | | |
| # DN 298 | Dental Assisting Clinical Experience III (6 weeks) | 2 | 8 | 4 |
| EN 120 | Communications* | 3 | 0 | 3 |
| | | | | 4-7 |
| | **TOTAL CREDITS** | | | **40-44** |

\# *Indicates major field courses.*

* *If not taken in Spring Semester*

***Please note: All students enrolled in a clinical course will be charged a $350/per semester clinical surcharge. The following courses carry this charge: DN 191 and DN 196.***

### NHTI Alumni Profile

**Emily Griffin**
Class of 1998
**Major:** Dental Assisting

Emily returned to college as a non-traditional student in 1996, graduating from NHTI in 1998.

*"Going back to school at age 42 proved to be a wonderful experience for me. The people at NHTI were so helpful. The professors were great. They all seemed to take a lot of pride in the school. Everyone seems to be pulling for the students to succeed, from Financial Aid to the Bookstore to Student Affairs. Going to NHTI really paid off. I graduated on Saturday and started a new job on Monday."*

### Specific Admission Requirements

*Preference will be given to applicants whose applications are complete and received by the NHTI Admissions Office no later than February 3, 2006 for Fall 2006 admission (with the exception of the interview).*

1. A course in high school science (biology or chemistry), or the equivalent, must have been completed with a minimum grade of "C";
2. An informational group interview with the Dental Admissions Committee is required;
3. Observe professional practices in a dental office for a period of not less than twenty hours prior to first-time enrollment;
4. Be in good physical and mental health in order to qualify for the program.

***Health, Character and Technical Standards, see page 48.***

### Use of Computers in the Allied Dental Education Programs

Allied Dental Education students will be using computers throughout their programs. Faculty will be instructing them in the application of dental software, as well as the use of conventional software to generate papers, do oral presentations and spreadsheets. To make this process easier for students, it is strongly recommended that they have a good working knowledge of computers before entering the program. Computer literacy courses, such as IT 102, are available through the college.

Though this curriculum is designed to be completed in the format listed, students may choose to take more time, depending on their individual circumstances. Students who anticipate taking more time to complete the program are *strongly encouraged to consult with their department head* at the time of registration each semester to ensure that prerequisite requirements are met and course selection is appropriate.

# Dental Hygiene

The Dental Hygiene program provides an extensive educational background for students seeking careers as Dental Hygienists. The program places a major emphasis on clinical work experience in the modern campus clinic as well as a variety of outside agencies and clinics. The clinical work is combined with classroom study in Dental Sciences, English, Biological Science, Nutrition and Social Sciences.

The degree of Associate in Science with a major in Dental Hygiene is awarded upon successful completion of the program. Graduates are able to find employment as hygienists or to continue their education at the baccalaureate level.

*Admission to the Dental Hygiene program is very competitive. Selection is determined by a cumulative point system that is based upon high school level prerequisite courses and grades, college courses and grades (only those courses required in the dental hygiene program), and the NLN score. Special attention is paid to grades in Anatomy and Physiology courses and Microbiology. It is highly recommended that applicants complete as many of the General Education courses (non-dental hygiene courses) as possible prior to application to the program. This will enhance the application for admission as well as lighten the academic load. These courses can be taken at NHTI through the General Studies program. Once in the General Studies program, students should consult that program's department head regarding course selection. Requests for consideration for the Dental Hygiene program should be made through the Admissions Office during the Fall semester. Students applying for readmission to the dental hygiene program will be considered on an individual basis.*

NHTI has transfer affiliations with four year institutions including:

- New England College

Please refer to *page 83* for suggestions on transferring to other institutions.

***Please note: All students enrolled in a clinical course will be charged a $350/per semester clinical surcharge. The following courses carry this charge: DN 113, DN 114, DN 212 and DN 221.***

## FIRST YEAR

| FALL SEMESTER | | | CL | LAB | CR |
|---|---|---|---|---|---|
| BI | 195 | Anatomy and Physiology I | 3 | 2 | 4 |
| CH | 110 | Introduction to Biochemistry | 3 | 2 | 4 |
| # DN | 100 | Dental Hygiene I | 2 | 0 | 2 |
| # DN | 113 | Clinical Dental Hygiene I | 1 | 8 | 3 |
| # DN | 134 | Oral Anatomy I | 2 | 1 | 2 |
| EN | 101 | English Composition | 4 | 0 | 4 |
| | | | | | 19 |
| **SPRING SEMESTER** | | | | | |
| BI | 196 | Anatomy and Physiology II | 3 | 2 | 4 |
| # DN | 103 | Dental Hygiene II | 2 | 0 | 2 |
| # DN | 114 | Clinical Dental Hygiene II | 1 | 8 | 3 |
| # DN | 136 | Oral Anatomy II | 2 | 0 | 2 |
| # DN | 140 | Dental Radiology for Dental Hygiene | 2 | 3 | 3 |
| MT | 129 | Math for Allied Health* ***or*** | | | |
| MT | xxx | Math Elective | 3 | 0 | 3 |
| | | | | | 17 |
| **SUMMER SEMESTER** | | | | | |
| BI | 202 | Microbiology | 3 | 3 | 4 |
| # DN | 162 | Dental Materials for Dental Hygiene | 2 | 3 | 3 |
| # DN | 201 | Dental Hygiene III | 2 | 1 | 2 |
| | | | | | 9 |

## SECOND YEAR

| FALL SEMESTER | | | CL | LAB | CR |
|---|---|---|---|---|---|
| # DN | 126 | Nutrition | 2 | 0 | 2 |
| # DN | 212 | Clinical Dental Hygiene III | 1 | 12 | 4 |
| # DN | 225 | Dental Hygiene Specialty Clinic** | 0 | 4 | 1 |
| # DN | 242 | Community Dental Health I | 2 | 0 | 2 |
| # DN | 240 | Dental Hygiene Science | 4 | 0 | 4 |
| PY | 105 | Introduction to Psychology | 3 | 0 | 3 |
| | | | | | 16 |
| **SPRING SEMESTER** | | | | | |
| EN | 120 | Communications | 3 | 0 | 3 |
| # DN | 221 | Clinical Dental Hygiene IV | 1 | 12 | 4 |
| # DN | 227 | Dental Ethics and Jurisprudence | 1 | 0 | 1 |
| # DN | 243 | Community Dental Health II | 1 | 0 | 1 |
| SO | 105 | Introduction to Sociology | 3 | 0 | 3 |
| XX | xxx | Humanities/Fine Arts/ Foreign Language Elective | 3 | 0 | 3 |
| | | | | | 15 |
| | | **TOTAL CREDITS** | | | **76** |

\# *Indicates major field courses*

* *Students may elect to take a higher level math course; MT 103 - MT 115 do not meet this requirement.*

** *Dental Hygiene Specialty Clinic will be offered in the fall semester and completed in the Spring semester.*

***Health, Character and Technical Standards, see page 48.***

## Specific Admission Requirements

*Preference will be given to applicants whose applications are complete and received by the NHTI Admissions Office no later than February 3, 2006 for Fall 2006 admission (with the exception of the interview and NLN test results if test taken in January or February 2006).*

1. *"Composite all" score of 50 or better on the National League for Nursing Pre-Admission Examination-RN (NLN) must be presented. Priority consideration will be given to candidates who sit for the NLN exam no later than the February testing date; applicants are permitted to take the NLN exam only once in any 12-month period; (Information regarding test registration is available from the Admissions Office.);*
2. College preparatory level courses in biology and chemistry, with labs, with grades of "C" or higher;
3. Algebra I with a grade of "C" or higher ***or*** NHTI's MT 103 ***and*** MT 104 with grades of "C" or higher;
4. An informational group interview with the Dental Admissions Committee;
5. Observe professional practices in a dental office for a period of not less than twenty hours prior to first-time enrollment; please submit to the Admission Office a letter from the dentist in whose office you observed dental practices;
6. Submit a complete physical examination and immunization record before program registration. This form may be obtained from the Health Services Office;
7. In addition to the above, applicants must be in good physical and mental health in order to qualify for the program.

## Use of Computers in the Allied Dental Education Programs

Allied Dental Education students will be using computers throughout their programs. Faculty will be instructing them in the application of dental software, as well as the use of conventional software to generate papers, do oral presentations and spreadsheets. To make this process easier for students, it is strongly recommended that they have a good working knowledge of computers before entering the program. Computer literacy courses, such as IT 102, are available through the college.

Though this curriculum is designed to be completed in the format listed, students may choose to take more time, depending on their individual circumstances. Students who anticipate taking more time to complete the program are *strongly encouraged to consult with their department head* at the time of registration each semester to ensure that prerequisite requirements are met and course selection is appropriate.

# Radiologic Technology

**(Early summer start date each year )**

The Radiologic Technology program integrates scientific concepts and working skills through intensive clinical experience and classroom study. The program requires 24 months of study. The RT specializes in the medical application of Radiographic techniques and equipment in the treatment of patients.

The degree of Associate in Science with a major in Radiologic Technology is awarded upon the successful completion of the program. Graduates are eligible to sit for the certification examination conducted by the American Registry of Radiologic Technologists to practice as a Registered Radiologic Technologist.

*Admission to the Radiologic Technology program is very competitive. Selection is determined by a cumulative point system that is based on the high school prerequisite courses and grades, college courses and grades (only those courses required in the Radiologic Technology Program), an essay and a personal interview. It is highly recommended that applicants complete as many of the General Education courses (non-Radiology courses) as possible prior to application to the program. A course in Medical Terminology is strongly recommended. This will enhance the application for admission as well as lighten the academic load. These courses can be taken at NHTI through the General Studies Program. Once in the General Studies program students should consult that program's department head regarding course selection. A "Request for Change of Program" form, available from the Admissions Office, should be submitted during the Fall semester prior to program start.*

## Diagnostic Medical Imaging Mission Statement

In concert with the Institute's Mission Statement, the Diagnostic Medical Imaging Department provides the highest standards of theoretical and clinical educational experiences for its students, thereby empowering them to improve the public's health by ensuring access to quality Sonographic and Radiologic health care. Through a process of continuous improvement, we will exceed expectations in educating our students.

### FIRST YEAR

| SUMMER SEMESTER (8 weeks) | | | CL | LAB | CR |
|---|---|---|---|---|---|
| # XR | 103 | Radiographic Positioning I | 1 | 2 | 2 |
| # XR | 109 | Clinical Seminar | 1 | 0 | 1 |
| # XR | 116 | Image Production and Evaluation I | 2 | 2 | 3 |
| # XR | 151 | Radiologic Nursing Procedures | 2 | 0 | 2 |
| | | | | | 8 |
| **FALL SEMESTER** | | | | | |
| BI | 195 | Anatomy and Physiology I | 3 | 2 | 4 |
| EN | 101 | English Composition | 4 | 0 | 4 |
| MT | 120 | Contemporary College Math | 4 | 0 | 4 |
| # XR | 159 | Radiographic Positioning II and Clinical Procedures I | 3 | 18 | 7 |
| # XR | 220 | Image Production and Evaluation II | 2 | 2 | 3 |
| | | | | | 22 |
| **SPRING SEMESTER** | | | | | |
| BI | 196 | Anatomy and Physiology II | 3 | 2 | 4 |
| EN | 120 | Communications | 3 | 0 | 3 |
| # XR | 164 | Radiographic Positioning III and Clinical Procedures II | 3 | 18 | 7 |
| # XR | 180 | Radiographic Equipment Operation and Maintenance | 3 | 0 | 3 |
| | | | | | 17 |

### SECOND YEAR

| SUMMER SEMESTER (11 weeks) | | | | | |
|---|---|---|---|---|---|
| PY | 105 | Introduction to Psychology | 3 | 0 | 3 |
| # XR | 201 | Pathology for Radiologic Technologists | 3 | 0 | 3 |
| # XR | 203 | Advanced Radiographic Procedures | 3 | 0 | 3 |
| # XR | 165 | Radiographic Clinical Procedures III | 0 | 24 | 4 |
| | | | | | 13 |
| **FALL SEMESTER** | | | | | |
| IT | 102 | PC Applications | 3 | 0 | 3 |
| SO | 105 | Introduction to Sociology | 3 | 0 | 3 |
| # XR | 123 | Radiation Protection | 3 | 0 | 3 |
| # XR | 294 | Radiographic Clinical Procedures IV | 0 | 24 | 4 |
| | | | | | 13 |
| **SPRING SEMESTER** | | | | | |
| PI | 242 | Contemporary Ethical Issues | 3 | 0 | 3 |
| # XR | 295 | Radiographic Clinical Procedures V | 0 | 32 | 6 |
| | | | | | 9 |
| | | **TOTAL CREDITS** | | | **82** |

*# Indicates major field courses.*

***Health, Character and Technical Standards, see page 48.***

## Specific Admission Requirements

*Preference will be given to applicants whose applications are complete and received by the NHTI Admissions Office no later than January 20, 2006 for Summer 2006 admission (with the exception of the interview).*

1. High school or college biology with lab AND chemistry with lab, both with grades of "C" or higher;
2. College preparatory algebra I with a grade of "C" or higher ***or*** NHTI's MT 103 ***and*** MT 104 both with grades of "C" or higher;
3. Personal interview will be arranged with the applicant by the Admission Office once the admission file is complete;
4. Applicants must attend a half-day informational seminar in the department prior to admission. Seminars are scheduled in the Fall semester. A written essay summarizing the candidate's research into the field of Radiologic Technology is required following the seminar. This essay is part of the cumulative point system for admission. Contact the Diagnostic Medical Imaging Department (603-271-7159) to schedule an informational seminar just prior to the Fall semester.
5. The applicant must complete a course in Cardiopulmonary Resuscitation and Airway Obstruction Management for one and two person adult, infant, and child before program registration.

Though this curriculum is designed to be completed in the format listed, students may choose to take more time, depending on their individual circumstances. Students who anticipate taking more time to complete the program are *strongly encouraged to consult with their department head* at the time of registration each semester to ensure that prerequisite requirements are met and course selection is appropriate.

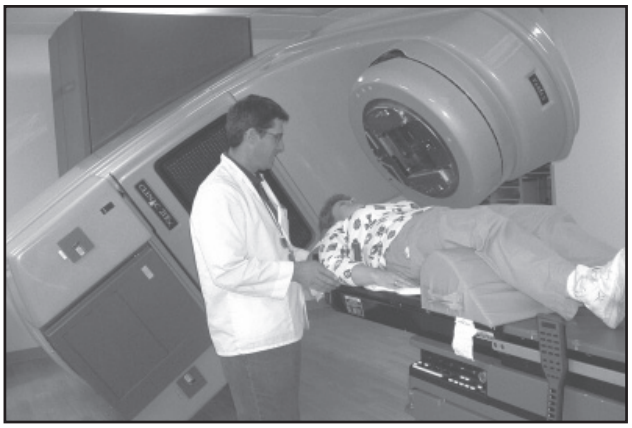
# Radiation Therapy

The Radiation Therapy Program utilizes didactic, laboratory, and clinical education to train students to work as Radiation Therapists in cancer treatment centers. Radiation Therapists work under the direction of an oncologist to treat patients with malignant diseases using ionizing radiation. The degree of Associate in Science with a major in Radiation Therapy is awarded upon successful completion of the program. A certificate option is available for students with prior degrees in Radiological Sciences. *See page 68 for certificate curriculum.* Radiation Therapists work in hospitals, private radiation oncology centers and research centers.

*Admission to the Radiation Therapy program is very competitive. Selection is determined by a cumulative point system that is based on the high school prerequisite courses and grades, college courses and grades (only those courses required in the Radiation Therapy Program), an observation essay and a personal interview. It is highly recommended that applicants complete as many General Education courses (non-Radiation Therapy courses) as possible prior to application to the program. This will enhance the application for admission as well as lighten the academic load. These courses can be taken at NHTI through the General Studies Program. Once in the General Studies Program students should consult that program's department head regarding course selection. A "Request for Change of Program" form, available from the Admissions Office, should be submitted during the Fall semester prior to the program start date.*

## FIRST YEAR

| FALL SEMESTER | | | CL | LAB | CR |
|---|---|---|---|---|---|
| BI | 195 | Anatomy and Physiology I | 3 | 2 | 4 |
| EN | 101 | English Composition | 4 | 0 | 4 |
| # RTH | 101 | Introduction to Radiation Therapy | 3 | 0 | 3 |
| # RTH | 110 | Principles and Practice of Radiation Therapy I | 3 | 2 | 4 |
| # RTH | 115 | Patient Care | 1 | 0 | 1 |
| | | | | | 16 |
| **SPRING SEMESTER** | | | | | |
| BI | 196 | Anatomy and Physiology II | 3 | 2 | 4 |
| MT | 123 | Intermediate Algebra | 4 | 0 | 4 |
| # RTH | 150 | Medical Imaging and Processing | 2 | 0 | 2 |
| # RTH | 190 | Clinical Practice I | 0 | 16 | 3 |
| XR | 180 | Radiographic Equipment Operation and Maintenance | 3 | 0 | 3 |
| | | | | | 16 |
| **SUMMER SEMESTER** | | | | | |
| EN | 120 | Communications | 3 | 0 | 3 |
| PI | 242 | Contemporary Ethical Issues | 3 | 0 | 3 |
| # RTH | 195 | Clinical Practice II | 0 | 16 | 3 |
| | | | | | 9 |



## SECOND YEAR

| FALL SEMESTER | | | CL | LAB | CR |
|---|---|---|---|---|---|
| PY | 105 | Introduction to Psychology | 3 | 0 | 3 |
| # RTH | 200 | Radiation Protection and Biology | 3 | 0 | 3 |
| # RTH | 220 | Radiation Therapy Physics | 3 | 0 | 3 |
| # RTH | 290 | Clinical Practice III | 0 | 24 | 4 |
| | | | | | 13 |
| **SPRING SEMESTER** | | | | | |
| # RTH | 205 | Treatment Planning | 3 | 0 | 3 |
| # RTH | 210 | Principles and Practice of Radiation Therapy II | 3 | 2 | 4 |
| # RTH | 215 | Sectional Anatomy and Pathology | 3 | 0 | 3 |
| # RTH | 293 | Clinical Practice IV | 0 | 24 | 4 |
| SO | 105 | Sociology | 3 | 0 | 3 |
| | | | | | 17 |
| **SUMMER SEMESTER** | | | | | |
| IT | 102 | PC Applications | 3 | 0 | 3 |
| # RTH | 280 | Registry Review | 1 | 0 | 1 |
| # RTH | 295 | Clinical Practice V | 0 | 32 | 6 |
| | | | | | 10 |
| | | **TOTAL CREDITS** | | | **81** |

## Specific Admission Requirements:

*Preference will be given to applicants whose applications are complete and received by the NHTI Admissions Office no later than February 17, 2006 (with the exception of the interview) for Fall 2006 admission.*

1. High school or college biology with lab AND chemistry with lab, both with grades of "C" or higher;
2. College preparatory algebra I with a grade of "C" or higher or NHTI's MT 103 and MT 104 both with grades of "C" or higher;
3. High school level physics is recommended;
4. Clinical observation period in a Radiation Oncology Center; criteria established by and available from program faculty; call 603-271-7159 for information;
5. Completion of Cardiopulmonary Resuscitation and Air way Obstruction Management for one and two person adult, infant and child before program registration;
6. A personal interview will be arranged with the applicant by the Admissions Office once the admission file is complete.

***Health, Character and Technical Standards, see page 48.***

## NHTI Alumni Profile

Melinda Lake
Class of 2004

**Major:** Radiation Therapy
**Employment:** Cheshire Medical Center
Keene, NH

*"Radiation Therapy was the perfect career choice for me. I find working with oncology patients very gratifying. It is a fascinating field where technology is constantly changing and there will always be opportunities for learning and professional growth. The program at NHTI is extremely challenging, yet perfectly planned and well put together in addition to an exceptional and very supportive teaching staff."*

Though this curriculum is designed to be completed in the format listed, students may choose to take more time, depending on their individual circumstances. Students who anticipate taking more time to complete the program are *strongly encouraged to consult with their department head* at the time of registration each semester to ensure that prerequisite requirements are met and course selection is appropriate.

# Diagnostic Medical Sonography

The Diagnostic Medical Sonography program combines didactic and clinical study that enables the graduate to function in the medical community as a Diagnostic Medical Sonographer. Sonographers perform medical imaging using sophisticated ultrasound instrumentation. The program is four semesters of full-time study. For admission to the program, the applicant should have had a two-year course in a patient care related allied health field.

A diploma in Diagnostic Medical Sonography is awarded to those students completing the full time program. Graduates find employment in hospitals and private clinics.

## FIRST YEAR

| FALL SEMESTER | | CL | LAB | CR |
|---|---|---|---|---|
| # DS 201 | Principles of Sonography | 3 | 2 | 4 |
| # DS 265 | Sonographic Anatomy and Pathology I | 3 | 0 | 3 |
| # DS 275 | Sonographic Principles of OB/GYN I | 3 | 0 | 3 |
| # DS 295 | DMS Clinic I | 0 | 16 | 4 |
| | | | | 14 |

| SPRING SEMESTER | | | | |
|---|---|---|---|---|
| # DS 221 | Sonographic Physics | 3 | 0 | 3 |
| # DS 266 | Sonographic Anatomy and Pathology II | 3 | 0 | 3 |
| # DS 277 | Sonographic Principles of OB/GYN II | 3 | 0 | 3 |
| # DS 296 | DMS Clinic II | 0 | 24 | 6 |
| | | | | 15 |

| SUMMER SEMESTER (10 weeks) | | | | |
|---|---|---|---|---|
| # DS 241 | Principles of Vascular Ultrasound | 3 | 2 | 4 |
| # DS 297 | DMS Clinic III | 0 | 32 | 8 |
| | | | | 12 |

## SECOND YEAR

| FALL SEMESTER | | | | |
|---|---|---|---|---|
| # DS 233 | Seminars in Sonography | 4 | 0 | 4 |
| # DS 298 | DMS Clinic IV | 0 | 32 | 8 |
| | | | | 12 |
| | **TOTAL CREDITS** | | | **53** |

\# *Indicates major field courses.*

## NHTI Faculty Profile

**Sandra Beliveau**
*Professor, Radiologic Technology*

A.S., New Hampshire Technical Institute
B.S., College for Lifelong Learning; University System of New Hampshire

Professor Beliveau came to NHTI in 1982 as a Radiology Clinical Instructor. She had previously served as Program Director at the Elliot School of Radiologic Technology.

*"Changes in the healthcare environment have created a need to expand the scope of knowledge required for our radiology students. We encourage them to be multi-skilled and to advance into areas such as CAT Scan, MRI, and Ultrasound. Our students leave our program with a strong sense of commitment to quality and excellence in the clinical setting."*

## Specific Admission Requirements

*Preference will be given to applicants whose applications are complete and received by the NHTI Admissions Office no later than January 20, 2006 for Fall 2006 admission (with the exception of the interview).*

1. Applicants must have completed a two year AMA or AMA equivalent allied health training program that is patient care related, e.g., nursing, radiologic technology, physical therapy, etc.;
2. In lieu of #1, a Bachelor's Degree in Science may qualify, subject to review by the Department Head;
3. Applicants must have completed college level Anatomy and Physiology I and II, with laboratory, with grades of "C" or higher;
4. Algebra I with a grade of "C" or higher ***or*** NHTI's MT 103 ***and*** MT 104 with grades of "C" or higher;
5. Algebra II or Geometry **and** Physics are strongly recommended.
6. A personal interview is required;
7. The applicant must complete a course in Cardiopulmonary Resuscitation and Airway Obstruction Management for one and two person adult, infant, and child before program registration.

# Health Science

The degree of Associate in Science with a major in Health Science is offered in recognition of the educational needs of people who are certified, licensed or registered in specific health career fields. To qualify for graduation from the program, candidates must show proof of current certification, licensure or registration in a recognized health career. Evaluation of credit received from a college or hospital-based program of study in a health-related field may result in the receipt of transfer credit or advanced standing credit toward the degree.

A candidate for this highly individualized degree must accumulate a minimum of 64 total credit hours, including the following:

| | | Credits |
|---|---|---|
| I. | General Education Core | |
| | • EN 101 English Composition | 4 |
| | • EN xxx English Elective | 3 |
| | • XX xxx Social Science Elective | 3 |
| | • BI 195 Anatomy and Physiology I | 4 |
| | • BI 196 Anatomy and Physiology II | 4 |
| | • MT xxx Mathematics Elective* | 3, 4, or 5 |
| | • XX xxx Humanities/Fine Arts/ Foreign Language Elective | 3 |
| | • XX xxx General Education Elective | 3 |
| | | **27-29 Credits** |
| II. | Computer Literacy (IT 102 or equivalent) | 3 |
| III. | Advanced Standing Credits | If appropriate |
| IV. | Related coursework to complete the degree | Variable |
| | **Total Credits** | **64** |

***Note:*** *A minimum of 16 credits hours must be earned through instruction at NHTI, with a minimum of 8 credit hours in courses numbered at the 200-level.*

In addition, students must earn a minimum of 8 semester hours in courses related to their health science certification or advanced standing equivalent.

Additional credits, up to the required 64 credits, may be taken in areas of interest or need of the individual student, or may be transferred in from another institution.

## Specific Admission Requirements

1. High school level courses in chemistry and biology with labs, or the equivalent, must be completed with grades of "C" or higher; and
2. Proof of licensure, registration, or certification in a health career field must be presented.

## NHTI Faculty Profile

**Patricia Yokell**
*Professor, Biological Sciences*

A.A.S., Nassau Community College;
B.S., Boston College;
M.S.T., Boston College

Professor Yokell came to NHTI in 1989 after having taught at the Post-secondary level for 15 years. She feels NHTI's educational philosophy serves its students well.

*"Many of the graduates from our Health Science programs return to tell us how much they appreciated our approach to teaching science courses. We hear that many students are initially intimidated by required science courses. We make it a point to help our chemistry and biology students overcome these concerns, so they can have more opportunities for success."*

* *MT 103 - MT 115 do not meet this requirement.*

Though this curriculum is designed to be completed in the format listed, students may choose to take more time, depending on their individual circumstances. Students who anticipate taking more time to complete the program are *strongly encouraged to consult with their department head* at the time of registration each semester to ensure that prerequisite requirements are met and course selection is appropriate.

# Nursing (Associate Degree)

The Associate in Science with a major in Nursing degree prepares men and women for careers as registered nurses. The program combines general education courses and nursing courses. In the nursing courses, classroom and clinical instruction are provided concurrently.

The nursing program is approved by the New Hampshire Board of Nursing and accredited by the National League for Nursing Accrediting Commission (NLNAC) (61 Broadway, NY, NY 10006; telephone 1-800-669-1656, ext. 153). Graduates are eligible to apply for the National Council Licensure Examination for Registered Nurses (NCLEX-RN®. They are prepared to administer nursing care to individuals of all ages and in a variety of health care settings.

Three program options exist at the Associate Degree level: (1) Day Option; (2) Evening Option; and (3) LPN-ADN Upward Mobility Option. *Both day and evening students may be required to do an alternate clinical rotation depending on clinical/faculty availability, i.e., day students may be asked to do an evening rotation and evening students may be asked to do a day rotation.*

All nursing courses must be completed within four (4) years of the date of entry into the first nursing course. Transfer credit will depend on course content, applicability to the nursing program, grade earned and length of time since completion.

*Admission to the nursing program is very competitive. Selection is determined by a cumulative point system that is based on high school level prerequisite courses and grades, applicable college courses and grades and the NLN score. References are considered critical to the admission process and are evaluated.*

NHTI has transfer agreements with the University of New Hampshire and the University of New England.

## Day Associate Degree Option

### FIRST YEAR

| | | | CL | LAB | CR |
|---|---|---|---|---|---|
| **FALL SEMESTER** | | | | | |
| BI | 195 | Anatomy and Physiology I | 3 | 2 | 4 |
| EN | 101 | English Composition | 4 | 0 | 4 |
| # NU | 115 | Nursing I | 5 | 10 | 8 |
| PY | 105 | Introduction to Psychology | 3 | 0 | 3 |
| | | | | | 19 |
| **SPRING SEMESTER** | | | | | |
| BI | 196 | Anatomy and Physiology II | 3 | 2 | 4 |
| # NU | 116 | Nursing IIA ***or*** | | | |
| # NU | 117 | Nursing IIB | 6 | 15 | 11 |
| PY | 220 | Human Growth and Development: The Life Span | 3 | 0 | 3 |
| | | | | | 18 |

### SECOND YEAR

| | | | CL | LAB | CR |
|---|---|---|---|---|---|
| **FALL SEMESTER** | | | | | |
| BI | 202 | Microbiology | 3 | 3 | 4 |
| MT | xxx | Math Elective* | 3-4 | 0 | 3-4 |
| # NU | 116 | Nursing IIA ***or*** | | | |
| # NU | 117 | Nursing IIB | 6 | 15 | 11 |
| | | | | | 18-19 |
| **SPRING SEMESTER** | | | | | |
| EN | xxx | English Elective | 3 | 0 | 3 |
| IT | 102 | PC Applications | 3 | 0 | 3 |
| # NU | 215 | Nursing III | 4 | 15 | 9 |
| PI | 242 | Contemporary Ethical Issues | 3 | 0 | 3 |
| | | | | | 18 |
| | | **TOTAL CREDITS** | | | **73-74** |

*CL - Classroom*
*LAB - Simulation laboratory, laboratory or clinical*
*CR - Credits*

\# *Indicates major field courses.*
* *Any course with a prefix of MT except MT 103 - 115; students will be advised regarding appropriate course selection.*

***Please see Nursing Program Comments on page 44.***
***Health, Character and Technical Standards, page 48.***

## Evening Associate Degree Option

This is an alternative schedule for students who prefer to take courses in the evening. ***Please note:*** *the lecture portions of the clinical courses are only offered in mid-afternoon, in conjunction with the day program lectures. Evening clinical hours may vary depending on clinical/faculty availability. Non-nursing courses are all available in the evening.*

### FIRST YEAR

| | | | CL | LAB | CR |
|---|---|---|---|---|---|
| **FALL SEMESTER** | | | | | |
| BI | 195 | Anatomy and Physiology I | 3 | 2 | 4 |
| EN | 101 | English Composition | 4 | 0 | 4 |
| | | | | | 8 |
| **SPRING SEMESTER** | | | | | |
| BI | 196 | Anatomy and Physiology II | 3 | 2 | 4 |
| PY | 105 | Introduction to Psychology | 3 | 0 | 3 |
| | | | | | 7 |
| **SUMMER SEMESTER** | | | | | |
| BI | 202 | Microbiology | 3 | 3 | 4 |
| EN | xxx | English Elective | 3 | 0 | 3 |
| | | | | | 7 |

### SECOND YEAR

| | | | CL | LAB | CR |
|---|---|---|---|---|---|
| **FALL SEMESTER** | | | | | |
| # NU | 115 | Nursing I | 5 | 10 | 8 |
| PY | 220 | Human Growth and Development: The Life Span | 3 | 0 | 3 |
| | | | | | 11 |
| **SPRING SEMESTER** | | | | | |
| # NU | 116 | Nursing IIA | 6 | 15 | 11 |
| MT | xxx | Math Elective* | 3-4 | 0 | 3-4 |
| | | | | | 14-15 |

### THIRD YEAR

| | | | CL | LAB | CR |
|---|---|---|---|---|---|
| **FALL SEMESTER** | | | | | |
| # NU | 117 | Nursing IIB | 6 | 15 | 11 |
| PI | 242 | Contemporary Ethical Issues | 3 | 0 | 3 |
| | | | | | 14 |
| **SPRING SEMESTER** | | | | | |
| # NU | 215 | Nursing III | 4 | 15 | 9 |
| IT | 102 | PC Applications | 3 | 0 | 3 |
| | | | | | 12 |
| | | **TOTAL CREDITS** | | | **73-74** |

## Specific Admission Requirements

Preference will be given to students whose applications are complete and received by the NHTI Admissions Office no later than February 3, 2006 for Fall 2006 admission (with the exception of NLN test results if test taken in January 2006). *Students will not be considered for admission until* ***all*** *admission requirements have been met.*

1. High school or college biology with lab AND chemistry with lab, both with grades of "C" or higher;
2. College preparatory algebra I with a grade of "C" or higher **or** NHTI's MT 103 **and** MT 104 both with grades of "C" or higher;
3. ***New for Fall 2006 applicants:*** Minimum "All" score of 50 in each section (verbal, mathematics and science) on the National League for Nursing Pre-Admission Examination-RN (NLN);
   - tests taken between September 2003 and May 2005 may be submitted and the previous scoring method (minimum "composite all" score of 50) will be used;
   - if a student who took the test between September 2003 and May 2005 wishes to retake the test, the score and scoring method used in the selection process will be the one most advantageous to the student;
   - students who took the test prior to September 2003 or who have not yet taken it must take the test no later than the January 21, 2006 testing date and will be evaluated on the new scoring method;
   - priority consideration will be given to candidates who complete their NLN requirement no later than the January 21, 2006 testing date AND submit the balance of the required application documents no later than February 3, 2006; applicants are permitted to take the NLN exam *only once in any 12-month period; when retaking the test students must take the entire test and will not be permitted to take just the portions of the test on which they received a low score*; information regarding registration for the test may be obtained from the Admissions Office at 603-271-7134 or 1-800-247-0197 or at www.nhti.edu.
4. Submit, on NHTI nursing reference forms, two references from professionals, supervisors or teachers.

# LPN - ADN Upward Mobility Option

The Upward Mobility Option is designed for the Licensed Practical Nurse who wishes to advance to a Registered Nurse with an Associate Degree in Science. This program provides the opportunity, through additional education, to apply for Registered Nurse Licensure upon successful completion. All nursing courses must be completed within four years of the date of entry in the first nursing course. Applicants must meet the admission requirements and receive a satisfactory score on the NLN Acceleration Challenge Exam I-Book I exam which is offered periodically throughout the year (see admission requirements below). Information regarding the admission test may be obtained from the Admissions Office at 603-271-7134.

*Admission to the nursing program is very competitive. Selection is determined by a cumulative point system that is based on high school level prerequisite courses and grades, applicable college courses and grades and the Challenge Exam score (see #5 below). References are considered critical to the admission process and are evaluated.*

*Transfer credit will be evaluated on an individual basis and may result in six(6) nursing credits being awarded. In addition, the LPN must complete the following curriculum:

## FIRST YEAR

| FALL SEMESTER | | | CL | LAB | CR |
|---|---|---|---|---|---|
| BI | 195 | Anatomy and Physiology I | 3 | 2 | 4 |
| EN | 101 | English Composition | 4 | 0 | 4 |
| # NU | 177 | Upward Mobility Nursing | 2 | 0 | 2 |
| PY | 105 | Introduction to Psychology | 3 | 0 | 3 |
| | | | | | 13 |

| SPRING SEMESTER | | | | | |
|---|---|---|---|---|---|
| BI | 196 | Anatomy and Physiology II | 3 | 2 | 4 |
| # NU | 116 | Nursing IIA ***or*** | | | |
| # NU | 117 | Nursing IIB | 6 | 15 | 11 |
| PY | 220 | Human Growth and Development: The Life Span | 3 | 0 | 3 |
| | | | | | 18 |

## SECOND YEAR

| FALL SEMESTER | | | | | |
|---|---|---|---|---|---|
| BI | 202 | Microbiology | 3 | 3 | 4 |
| MT | xxx | Math Elective** | 3-4 | 0 | 3-4 |
| # NU | 117 | Nursing IIB ***or*** | | | |
| # NU | 116 | Nursing IIA | 6 | 15 | 11 |
| | | | | | 18-19 |

| SPRING SEMESTER | | | | | |
|---|---|---|---|---|---|
| EN | xxx | English Elective | 3 | 0 | 3 |
| IT | 102 | PC Applications | 3 | 0 | 3 |
| # NU | 215 | Nursing III | 4 | 15 | 9 |
| PI | 242 | Contemporary Ethical Issues | 3 | 0 | 3 |
| | | | | | 18 |

**TOTAL CREDITS** **73-74***

\# *Indicates major field courses*

* *Includes six(6) credits awarded from Challenge Exam.*

** *Any course with a prefix of MT except MT 103-115; students will be advised regarding appropriate course selection.*

***Health, Character and Technical Standards, see page 48.***

## Program Comments:

RN and Upward Mobility Nursing

1. Applicants are strongly encouraged to attend a group information session; please call the Admissions Office at 603-271-7134 for details.
2. Prior to the start of the clinical nursing courses, students are required to have on file in the Health Services Office (603-271-7153) documentation of: current medical insurance; a complete physical examination; current immunizations; current CPR certification for one and two person adult, infant and child. Professional liability insurance is arranged by the College and will automatically be charged to the student's account.
3. Clinical facilities are located within a radius of 60 miles of NHTI.
4. All students enrolled in a clinical nursing course will be charged a $350/semester Nursing Clinical Surcharge. The following courses carry this charge: NU 115, NU 116, NU 117 and NU 215.

## NHTI Alumni Profile

**Alecia Cargill**
**Class of 2004**

**Major:** Nursing

*"I transferred to NHTI from another college where my career goal to be a nurse was not encouraged. There's no way I'd be in the nursing profession without the great support I received from the NHTI faculty and Learning Center. Now, I'm working as a nurse at Concord Hospital, and I hope to enter UNH's RN to master's degree program. I'm passionate about the profession and enthused to do what I know I was meant to do."*

## Specific Admission Requirements Upward Mobility Option

*Preference will be given to students whose applications are complete and received by the NHTI Admissions Office no later than the second week in August. Students will not be considered for admission until all admission requirements have been met.*

1. High school or college biology with lab AND chemistry with lab, both with grades of "C" or higher;
2. College preparatory algebra I with a grade of "C" or higher ***or*** NHTI's MT 103 ***and*** MT 104 both with grades of "C" or higher;
3. Preference will be given to students who hold an active New Hampshire Practical Nursing license and are in good standing with the Board of Nursing; applicants must submit a copy of their license with their application for admission;
4. Submit, on NHTI nursing reference forms, two references from professionals, supervisors or teachers;
5. "Decision Score" of 70 or better on the National League for Nursing Acceleration Challenge Exam I – Book I. Information regarding this test is available from the Admissions Office at 603-271-7134 or 1-800-247-0179.

Though this curriculum is designed to be completed in the format listed, students may choose to take more time, depending on their individual circumstances. Students who anticipate taking more time to complete the program are *strongly encouraged to consult with their department head* at the time of registration each semester to ensure that prerequisite requirements are met and course selection is appropriate.

# Practical Nursing Program

***(January start each year)***

The Practical Nursing program is designed to prepare men and women for careers as practical nurses. Classroom and clinical instruction are provided concurrently in all nursing courses.

The nursing program is approved by the New Hampshire Board of Nursing. Upon graduation students are prepared to work as entry level members of a multidisciplinary team providing care in a variety of health care settings. Graduates receive a Diploma in Practical Nursing and are eligible to apply for the National Council Licensure Examination for Practical Nurses (NCLEX-PN® Examination). Graduates may also apply for the LPN - ADN Upward Mobility advanced placement option after completing the appropriate admissions process and satisfying the specific admission requirements.

All Practical Nursing courses must be completed within two (2) years of the date of entry into the program. Transfer credit for courses equivalent in academic content and credit hours will depend upon the grade obtained, course content, and the length of time since the course was completed. Contact the Admissions Office for information about transfer credit at (603) 271-7134. This program begins in January each year.

*Admission to the practical nursing program is very competitive. Selection is determined by a cumulative point system that is based on high school level prerequisite courses and grades, applicable college courses and grades and NHTI assessment testing. References are considered critical to the admission process and are evaluated.*

**FIRST YEAR**

| | | | | | |
|---|---|---|---|---|---|
| **SPRING SEMESTER** | | | **CL** | **LAB** | **CR** |
| | BI 107 | Integrated Biological Science+* | 3 | 0 | 3 |
| | EN 101 | English Composition | 4 | 0 | 4 |
| # | PN 101 | Practical Nursing I | 4 | 12 | 8 |
| | PY 105 | Introduction to Psychology | 3 | 0 | 3 |
| | | | | | 18 |
| **SUMMER SEMESTER** | | | | | |
| | BI 107 | Integrated Biological Science+* | 2 | 0 | 2 |
| # | PN 102 | Practical Nursing II | 3 | 15 | 8 |
| | PY 220 | Human Growth and Development: The Life Span | 3 | 0 | 3 |
| | | | | | 13 |
| **FALL SEMESTER** | | | | | |
| # | PN 103 | Practical Nursing III | 4 | 15 | 9 |
| | MT 129 | Math for Allied Health | 3 | 0 | 3 |
| | | | | | 12 |
| | | **TOTAL CREDITS** | | | **43** |

\+ *BI 107 is spread over two semesters; 5 credits will be earned at the end of the second part of the course pending successful completion of both parts of the course.*

* *Higher level science courses may be recommended as substitutions for students considering admission to the NHTI RN program in the future.*

\# *Indicates major field courses.*

## Program Comments:

### Practical Nursing

1. Applicants are strongly encouraged to attend a group information session; please call the Admissions Office at 603-271-7134 for details;
2. Prior to the start of the clinical nursing courses, students are required to have on file in the Health Services Office (603-271-7153) documentation of: current medical insurance; a complete physical examination; current immunizations; current CPR certification for one and two person adult, infant and child. Professional liability insurance is arranged by the College and will automatically be charged to the student's account.
3. Clinical facilities are located within a radius of 60 miles of NHTI.
4. *Depending on clinical site availability, students may be required to do an alternative clinical rotation (day or evening).*
5. All students enrolled in a nursing course will be charged a $350/semester Nursing Clinical Surcharge. The following courses carry this charge: PN 101, PN 102 and PN 103.

## Specific Admission Requirements Practical Nursing

1. High school Algebra I with a grade of "C" or higher OR NHTI's MT 103 and MT 104 with grades of "C" or higher;
2. High school biology course with lab with a grade of "C" or higher;
3. High school course in English with a grade of "C" or higher;
4. Submit, on NHTI nursing reference forms, two references from professionals, supervisors or teachers;
5. Satisfactory completion of NHTI assessment tests in math, reading comprehension and writing is required for admission; waivers may be granted for some the tests based on previous college courses or test scores; information regarding testing is available from the Admissions Office at 603-271-7134;
6. Preference will be given to students whose applications are complete and received by the NHTI Admissions Office, *with the exception of the assessment testing*, no later than October 7, 2005 for admission consideration for the program beginning in January 2006.

***Health, Character and Technical Standards, see page 48.***



Though this curriculum is designed to be completed in the format listed, students may choose to take more time, depending on their individual circumstances. Students who anticipate taking more time to complete the program are *strongly encouraged to consult with their department head* at the time of registration each semester to ensure that prerequisite requirements are met and course selection is appropriate.

# Paramedic Emergency Medicine

New Hampshire Technical Institute's Associate in Science with a major in Paramedic Emergency Medicine combines a unique blend of paramedic courses, general education requirements, specialty certifications and diverse hospital and pre-hospital experiences. NHTI students have the opportunity to work with some of New England's finest hospital and pre-hospital affiliates.

Program emphasis is placed on the development of paramedic knowledge and theory, practical skills application, interpersonal skills, and the professional behaviors required of the entry level paramedic. The development of leadership skills, individual professional growth, and academic achievement are integral parts of the program.

The degree of Associate in Science with a major in Paramedic Emergency Medicine is awarded upon successful completion of the program.

Please refer to *page 83* for suggestions on transferring to other institutions.

## FIRST YEAR

| FALL SEMESTER | | | CL | LAB | CR |
|---|---|---|---|---|---|
| BI | 195 | Anatomy and Physiology I | 3 | 2 | 4 |
| EN | 101 | English Composition | 4 | 0 | 4 |
| # PM | 117 | Physical Assessment | 2 | 0 | 2 |
| # PM | 142 | Cardiology I | 2 | 0 | 2 |
| # PM | 150 | Advanced Trauma | 3 | 0 | 3 |
| # PM | 161 | Integration Lab I | 0 | 3 | 1 |
| | | | | | 16 |
| **SPRING SEMESTER** | | | | | |
| BI | 196 | Anatomy and Physiology II | 3 | 2 | 4 |
| MT | 129 | Math for Allied Health | 3 | 0 | 3 |
| # PM | 111 | Paramedic Procedures | 1 | 3 | 2 |
| # PM | 125 | Pharmacology | 3 | 0 | 3 |
| # PM | 135 | Medical Emergencies | 3 | 0 | 3 |
| # PM | 162 | Integration Lab II | 0 | 3 | 1 |
| # PM | 244 | Advanced Cardiology | 2 | 0 | 2 |
| | | | | | 18 |
| **SUMMER SEMESTER** | | | | | |
| # PM | 190 | Introduction to Clinical Environment | 1 | 0 | 1 |
| # PM | 194 | Hospital Clinic | 0 | 18 | 5 |
| | | | | | 6 |

## NHTI Alumni Profile

**Ryan Pouliot**
**Class of 2002**

**Major:** Paramedic Emergency Medicine

Ryan is currently employed at Greater Lowell Emergency Medical Services in Lowell, Massachusetts and "*absolutely loves working there.*"

*"The paramedic program at NHTI carries a reputation in the EMS community that excels far beyond other programs. The education offers opportunities and advantages that speak for themselves in the field."*

## SECOND YEAR

| FALL SEMESTER | | | CL | LAB | CR |
|---|---|---|---|---|---|
| BI | 222 | Pathophysiology | 3 | 0 | 3 |
| # PM | 163 | Integration Lab III | 0 | 2 | 1 |
| # PM | 200 | Introduction to the Field Experience | 1 | 0 | 1 |
| # PM | 201 | Special Populations | 3 | 0 | 3 |
| # PM | 296 | Field Clinical I | 0 | 9 | 3 |
| PY | 105 | Introduction to Psychology | 3 | 0 | 3 |
| | | | | | 14 |
| **SPRING SEMESTER** | | | | | |
| EN | 120 | Communications | 3 | 0 | 3 |
| IT | 102 | PC Applications | 3 | 0 | 3 |
| # PM | 164 | Integration Lab IV | 0 | 2 | 1 |
| # PM | 210 | Field Operations | 2 | 0 | 2 |
| # PM | 278 | Advanced Paramedic Practice | 2 | 0 | 2 |
| # PM | 297 | Field Clinical II | 0 | 9 | 3 |
| XX | xxx | Humanities/Fine Arts/Foreign Language Elective | 3 | 0 | 3 |
| | | | | | 17 |
| | | **TOTAL CREDITS** | | | **71** |

\# *Indicates major field course*

***Health, Character and Technical Standards, on page 48.***

## Specific Admission Requirements

1. High school level courses in Biology and Chemistry (with labs) completed with grades of "C" or higher;
2. Algebra I completed with a grade of "C" or higher or NHTI's MT 103 and MT 104 both with grades of "C" or higher;
3. Submit copy of National Registry or State EMT;
4. Submit copy of current BCLS/CPR card;
5. Letter of recommendation from EMS supervisor;
6. Submit documentation of at least 100 completed field calls using Option 1 or Option 2. These requirements are designed to verify that you have had sufficient BLS experience and that you have served as the Team Leader prior to the start of your program. (Contact either the Paramedic Department or Admissions Office for the Options Packet.)
   a. **OPTION 1:** Please have your EMS officer complete the verification letter;
   b. **OPTION 2:** You must complete 100 calls (that have patient contact). Of the 100 calls you must complete 25 of the required forms attesting to your serving as the Team Leader. For each team leader role also complete the Run Report Form;
7. A personal interview with the Department Admissions Committee;
8 *Students who do not meet the EMT requirements and required field calls may want to consider the* Paramedic Emergency Medicine *Preparation Track located on page 47;*
9. Must be 18 years of age or older.

Though this curriculum is designed to be completed in the format listed, students may choose to take more time, depending on their individual circumstances. Students who anticipate taking more time to complete the program are *strongly encouraged to consult with their department head* at the time of registration each semester to ensure that prerequisite requirements are met and course selection is appropriate.

# Paramedic Emergency Medicine *Preparation Track*

The Paramedic Emergency Medicine *Preparation Track* offers currently **certified EMT's** with little to no background in EMS an opportunity to gain the credentials and experience needed for eligibility to the Paramedic track of the program. Students will gain valuable and required field experience offered through the Basic Life Support (BLS) Field Internship rotations which start in the Fall semester. Coupled with a compliment of EMT-related seminars and general studies courses, students are set up for success in meeting the eligibility requirements for the paramedic component of the program and are prepared to complete a curriculum that takes them all the way to an Associate Degree in Paramedic Emergency Medicine and a career as a Paramedic.

*Completion of this track does not guarantee admission to the Paramedic Emergency Medicine program. Students who wish to apply for the Paramedic Emergency Medicine program must satisfy all admission requirements for the program, which can be found on page 46.*

**FIRST YEAR**

| FALL SEMESTER | | | CL | LAB | CR |
|---|---|---|---|---|---|
| # EMT | 101 | Basic Life Support Field Clinic | 0 | 6 | 2 |
| # EMT | 104 | Topics in EMT Basic Practice | 2 | 0 | 2 |
| EN | 101 | English Composition | 4 | 0 | 4 |
| HS | 101 | Medical Terminology | 3 | 0 | 3 |
| MT | 129 | Math for Allied Health | 3 | 0 | 3 |

| SPRING SEMESTER | | | | | |
|---|---|---|---|---|---|
| # EMT | 102 | Basic Life Support Field Clinic | 0 | 9 | 3 |
| # EMT | 105 | Advanced EMT Basic Practice | 2 | 0 | 2 |
| EN | 120 | Communications | 3 | 0 | 3 |
| IT | 102 | PC Applications | 3 | 0 | 3 |
| | | Science Course* | | | |

**SECOND YEAR**

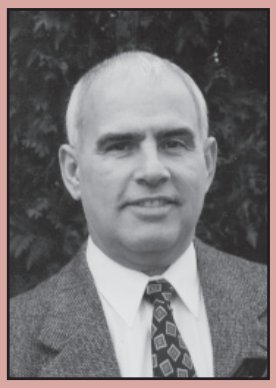
| FALL SEMESTER | | | | | |
|---|---|---|---|---|---|
| # EMT | 103 | Basic Life Support Field Clinic Section C (Optional) | 0 | 9 | 3 |

**START PARAMEDIC TRACK**

*# Indicates major field course*

** Students who need either the biology or chemistry prerequisite should take it during the spring semester; students who have completed the prerequisite science courses may take BI 195.*

***Health, Character and Technical Standards, on page 48.***



## NHTI Faculty Profile

**Patrick W. Lanzetta, MD FACEP**
*Medical Director, Paramedic Emergency Medicine Preparation Track*

B.S., St. John's University
M.D., University of Montpellier, France

ECFMG, ACLS, ATLS
American Board of Emergency Medicine
American Board of Forensic Examiners
Board of Directors, ACEP New Hampshire Chapter

*"Over the past three decades, pre-hospital medical care has evolved from the realm of simple first aid to today's system of advanced procedural, invasive and pharmacological interventions. The knowledge required to perform in such a complex environment can only be imparted in centers of higher education. NHTI provides that knowledge and is nationally recognized as a leader in paramedic education."*

## Specific Admission Requirements

1. High school graduate or GED;
2. Age 18 by September 1st of admission year;
3. EMT certification required; must be certified by the beginning of fall semester as an EMT;
4. High school level courses in Biology and Chemistry (with labs), completed with grades of "C" or higher;
5. Algebra I completed with a grade of "C" or higher or NHTI's MT 103 and MT 104 both with grades of "C" or higher;
6. Students who have not completed one or more of the courses in items #4 and #5 will be advised by the Admissions Office and department faculty regarding admissibility to the Paramedic Emergency Medicine Preparation Track;
7. At the time of application submit either EMT certification or proof of enrollment in an EMT course;
8. All Paramedic Emergency Medicine *Preparation Track* courses taken must be successfully completed in order to be eligible for the paramedic program.
9. Admission requirements for the Paramedic program can be found on *page 46*.



Though this curriculum is designed to be completed in the format listed, students may choose to take more time, depending on their individual circumstances. Students who anticipate taking more time to complete the program are *strongly encouraged to consult with their department head* at the time of registration each semester to ensure that prerequisite requirements are met and course selection is appropriate.

# Health, Character and Technical Standards for Health Programs

Technical standards have been established as a guidance tool for use in realistically informing the student of minimum standards needed to satisfactorily function in the program and ultimately in the profession. Applicants who feel they may not be able to meet one or more of the technical standards listed below should contact the program officials to discuss individual cases. The program officials will seriously consider all academically qualified candidates providing that the technical standards can be met with reasonable accommodations.

The college must ensure that patients/clients are not placed in jeopardy by students during learning experiences. Therefore, students in practica, service learning and clinical experiences must demonstrate sufficient emotional stability to withstand the stresses, uncertainties, and changing circumstances that characterize patient/client care responsibilities. Furthermore, the student is expected to have the emotional stability required to exercise sound judgment, accept direction and guidance from a supervisor or faculty member and establish rapport and maintain sensitive interpersonal relationships with employees, customers and/or patients/clients and their families.

## Dental Assisting *(see Program page 37)*

The student must have the sufficient motor coordination required to carry out dental assisting procedures to include:

1. Sitting at chairside for a sustained length of time with frequent reaching and turning;
2. Manual dexterity to safely perform intraoral instrumentation;
3. Sufficient hearing to assess patient needs;
4. Sufficient eyesight to observe patients, operate dental equipment, including x-ray machines; visual acuity (correctable) to work with small measurements in preparing and manipulating dental materials.

## Dental Hygiene *(see Program page 38)*

The student must have the sufficient motor coordination required to carry out dental hygiene procedures to include:

1. Sitting at chairside for a sustained length of time with frequent reaching;
2. Manual dexterity to safely perform intraoral instrumentation;
3. Sufficient hearing to assess patient needs;
4. Sufficient eyesight to observe patients, operate equipment and evaluate radiographs; visual acuity (correctable) to work with small measurements, and to interpret small defects;
5. Sufficient writing skills to record medical and dental data and communicate with other dental professionals; ability to express ideas to educate the client and exchange information with other health professionals.

## Radiologic Technology and Radiation Therapy *(see Program pages 39 & 40)*

The student must have sufficient strength and motor coordination required to perform the following physical activities:

1. Standing for sustained periods of time and walking most of the work day to accomplish tasks;
2. Frequent reaching and manual dexterity in handling accessory equipment for radiographic purposes including typing on computer terminals;
3. Frequently transporting, moving, lifting and transferring patients from a wheelchair or stretcher to and from a radiographic table.

In addition, the student must have:

1. Sufficient eyesight to observe patients, manipulate equipment and evaluate radiographic quality. Visual acuity (correctable) sufficient to work with analyzing data and figures, working with computer terminals, extensive reading, visual inspection involving small defects, small parts, and operation of machines;
2. Sufficient hearing to assess patient needs;
3. Sufficient writing skills to communicate needs promptly and effectively. Ability to express or exchange ideas by means of the spoken word. Primary functions include activities in which the student must convey detailed or important spoken instructions to patients, physicians, families, and other employees accurately, and loudly or quickly; and
4. Ability to work with frequent interruptions and respond appropriately to unexpected situations. Ability to work with wide variations in work load and stress levels.

## Nursing (RN, Upward Mobility & PN Programs)

*(see Program pages 43, 44 & 45)*

Applicants must be in good physical and mental health in order to qualify for RN or PN licensure. In addition, State Boards of Nursing may have specific requirements regarding prior convictions of offenses and licensure. Please contact the Board of Nursing in the state in which practice is planned regarding licensure requirements. Satisfactory completion of program does not guarantee RN or PN licensure.

Standards have been established to provide guidance to students as to skills and abilities required to function successfully in the program and ultimately in the profession of nursing. Applicants who think they may not be able to meet one or more of the technical standards should contact department faculty to discuss individual cases.

1. Sufficient hearing to assess patient needs and to understand instructions, emergency signals and telephone conversation.
2. Sufficient visual acuity to observe patients, manipulate equipment, and interpret data; visual acuity sufficient to ensure a safe environment, identify color changes, read fine print/writing and calculate fine calibrations.
3. Sufficient verbal ability to express and exchange information and ideas and to interact with patients, family members, physicians, peers and other ancillary medical personnel.
4. Ability to work with frequent interruptions, to respond appropriately in emergencies or unexpected situations and to cope with extreme variations in workload and stress levels.
5. Sufficient strength and motor coordination to perform the following physical activities: manual dexterity in handling and lifting equipment; frequently moving, lifting, and transferring patients; and performing CPR.

## Paramedic Emergency Medicine *(see Program page 46)* & Paramedic Emergency Medicine *Preparation Track* *(see Program page 47)*

**Technical/Physical Standards**

Paramedic Emergency Medicine Program students must have sufficient strength and motor coordination required to perform the following physical activities: standing and walking for sustained periods of time; driving an ambulance and/or rescue unit under emergency conditions; frequent reaching and manual dexterity in handling equipment often in confined spaces; frequently transporting, moving, lifting, and transferring patients of various sizes to and from a stretcher and other patient transport devices.

**Health Requirements**

Annual TB testing; Hepatitis B vaccine; personal health insurance; completed health physical (all students are sent Institute health forms upon acceptance. These forms must be completed prior to the start of classes); and Institute liability insurance.

**In Addition:**

Never been convicted of a felony (may interfere with National Registry eligibility); sufficient eyesight (correctable) to observe patients, manipulate equipment, and interpret data. Visual acuity (correctable) sufficient to work with analyzing data and figures, working with computer terminals, making visual inspections of equipment; sufficient hearing (correctable) to assess patient needs and to understand instructions; sufficient written and oral skills to communicate needs promptly and effectively, to express or exchange ideas and to interact with patients, physicians, peers and other ancillary medical personnel as well as other public service emergency personnel; ability to work with frequent interruptions and respond appropriately to unexpected situations. Ability to work with wide variations in workload and stress levels; mental health status to cope with personal stresses in a way that does not adversely affect performance, such as mood changes, lack of concentration, etc.

# HUMAN SERVICE PROGRAMS

## Addiction Counseling

The Addiction Counseling Program provides professional Addiction Counseling Education and field experience for students who seek careers as addiction counselors and human service professionals with a specialty in addiction knowledge and counseling. Coursework incorporates both theory and skill practice as well as practica experience, including specialized addiction courses, individual and group counseling, interviewing, crisis intervention and conflict resolution. The practica offer the student the direct exposure and learning within the addiction field. The degree of Associate in Science with a major in Addiction Counseling will be awarded upon successful completion of all program requirements.

Graduates of the program serve in positions in public and private general psychiatric units and hospitals, youth and group homes, addiction treatment centers, diversion programs and mental health and social service agencies. The program also serves as a basis for the student to transfer on to a baccalaureate program. Students are academically and professionally prepared for the process of becoming a New Hampshire Licensed Alcohol and Drug Counselor.

The Addiction Counseling Program holds national program approval with the national accrediting body for Human Service Degree Programs, the Council for Standards in Human Service Education (CSHSE).

*A dual admission program is available with Granite State College for those interested in continuing their education.*

### FIRST YEAR

| FALL SEMESTER | | | CL | LAB | CR |
|---|---|---|---|---|---|
| # AD | 120 | Survey of Addictive Behaviors and Treatment | 3 | 0 | 3 |
| EN | 101 | English Composition | 4 | 0 | 4 |
| # HU | 111 | Introduction to Human Service | 3 | 0 | 3 |
| # MH | 187 | The Helping Relationship: Interpersonal Communication Skills for Today's Professional | 4 | 0 | 4 |
| PY | 105 | Introduction to Psychology | 3 | 0 | 3 |
| | | | | | 17 |
| **SPRING SEMESTER** | | | | | |
| # AD | 205 | Fundamentals of Dependency Counseling Skills | 3 | 0 | 3 |
| BI | 120 | Human Biology | 3 | 2 | 4 |
| IT | 102 | PC Applications | 3 | 0 | 3 |
| # SO | 250 | Conflict Resolution in Modern Society | 3 | 0 | 3 |
| # PY | 283 | Group Counseling | 3 | 0 | 3 |
| | | | | | 16 |

### Specific Academic Requirements

1. Candidates may be required to have a personal interview with a department faculty member;
2. Please refer to starred* statement on this page regarding mathematics graduation requirement.

*Sobriety Statement* - The Human Service Department abides by the accepted national standard that recommends a minimum of two years of sobriety for any prospective trainee in the field of alcohol and other drug abuse counseling.

***Health, Character and Technical Standards, see page 51.***

### SECOND YEAR

| FALL SEMESTER | | | CL | LAB | CR |
|---|---|---|---|---|---|
| # AD | 296 | Addiction Practicum I | 2 | 8 | 4 |
| MT | 120 | Contemporary College Mathematics* | 4 | 0 | 4 |
| # PY | 220 | Human Growth and Development: The Life Span | 3 | 0 | 3 |
| # PY | 280 | Individual Counseling: Theory and Practice | 3 | 0 | 3 |
| XX | xxx | Humanities/Fine Arts/ Foreign Language Elective | 3 | 0 | 3 |
| | | | | | 17 |
| **SPRING SEMESTER** | | | | | |
| # AD | 235 | Physiology and Pharmacology of Addiction | 3 | 0 | 3 |
| # AD | 270 | Advanced Seminar in Addictive Behaviors Counseling | 3 | 0 | 3 |
| # AD | 297 | Addiction Practicum II | 2 | 8 | 4 |
| EN | xxx | English Elective | 3 | 0 | 3 |
| #HU | 242 | Ethics and the Professional Helper | 3 | 0 | 3 |
| PY | 205 | Crisis Intervention | 3 | 0 | 3 |
| | | | | | 19 |
| | | **TOTAL CREDITS** | | | **69** |

\# *Indicates major field courses*

* *Students must complete MT 120 to graduate. Depending on results of assessment testing, students may be required to complete MT 103 prior to MT 120 (please note that MT 103 Algebra I - Part I, with a grade of "C" or higher, or the high school equivalent with a grade of "C" or higher, is the prerequisite for MT 120).*

### NHTI Faculty Profile

**Kathleen Rossetti Curran**

*Department Head, Human Service and Addiction Counseling*

B.S., University of Bridgeport
M. Ed., Notre Dame College

LicNHMHC

Professor Curran came to NHTI in 1981. Her work in the community as a NH Licensed Mental Health Counselor working with youth, adults and families has enhanced the students' learning and classroom experience.

*" The students in the Human Service, Mental Health and Addiction Counseling programs are superb! The knowledge and skills they acquire through classes, extensive practicum work and NHTI life experience help our students to enter their careers with quality standards and excellence as helping professionals."*



Though this curriculum is designed to be completed in the format listed, students may choose to take more time, depending on their individual circumstances. Students who anticipate taking more time to complete the program are *strongly encouraged to consult with their department head* at the time of registration each semester to ensure that prerequisite requirements are met and course selection is appropriate.

# Human Service

The Human Service program prepares students to work effectively and knowledgeably with individuals and systems in need of direct care, assistance and personal support. Students will develop skills and competencies in interviewing, counseling, case management and crisis intervention, and will be able to network clients with needed community resources and services. In addition, the program prepares and serves for the student as a basis to transfer on to complete a baccalaureate degree.

Two practica courses provide students with 250 hours of professional experience in the human service field. Students are involved in the selection of the sites in which to fulfill the desired practica requirements. Each practicum enables students to apply what they have been learning in class to practical, hands-on situations.

The degree of Associate in Science with a major in Human Service is awarded upon successful completion of the program. The degree offers students opportunities which may lead to employment in human service agencies, youth and group homes, community service councils, health care facilities, hospitals and school systems.

The Human Service Program holds national program approval with the national accrediting body for Human Service Degree Programs, the Council for Standards in Human Service Education (CSHSE).

Students may elect to focus their educational direction in the mental health field by pursuing two practica that are focused specifically in mental health. Here the student's placement will be in an approved mental health based facility.

*A dual admission program is available with Granite State College for those interested in continuing their education.*

## FIRST YEAR

| FALL SEMESTER | | | CL | LAB | CR |
|---|---|---|---|---|---|
| EN | 101 | English Composition | 4 | 0 | 4 |
| # HU | 111 | Introduction to Human Service | 3 | 0 | 3 |
| # HU | 221 | Social and Professional Issues in Today's Society | 3 | 0 | 3 |
| # MH | 187 | The Helping Relationship: Interpersonal Communication Skills for Today's Professional | 4 | 0 | 4 |
| PY | 105 | Introduction to Psychology | 3 | 0 | 3 |
| | | | | | 17 |

| SPRING SEMESTER | | | | | |
|---|---|---|---|---|---|
| # AD | 120 | Survey of Addictive Behavior and Treatment | 3 | 0 | 3 |
| BI | 120 | Human Biology | 3 | 2 | 4 |
| #HU | 103 | Introduction to Practicum Experience | 1 | 0 | 1 |
| IT | 102 | PC Applications | 3 | 0 | 3 |
| # PY | 283 | Group Counseling | 3 | 0 | 3 |
| # SO | 250 | Conflict Resolution in Modern Society | 3 | 0 | 3 |
| | | | | | 17 |

## Specific Admission Requirements

1. Candidates may be required to have a personal interview with a department faculty member;
2. Please refer to starred* statement on this page regarding mathematics graduation requirement.

## HUMAN SERVICE OPTION
## SECOND YEAR

| FALL SEMESTER | | | CL | LAB | CR |
|---|---|---|---|---|---|
| # HU | 195 | Human Service Practicum I | 2 | 8 | 4 |
| MT | 120 | Contemporary College Mathematics* | 4 | 0 | 4 |
| PY | 220 | Human Growth and Development: The Life Span | 3 | 0 | 3 |
| # PY | 280 | Individual Counseling: Theory and Practice | 3 | 0 | 3 |
| XX | xxx | Humanities/Fine Arts/ Foreign Language Elective | 3 | 0 | 3 |
| | | | | | 17 |

| SPRING SEMESTER | | | | | |
|---|---|---|---|---|---|
| # AD | 235 | Physiology and Pharmacology of Addiction | 3 | 0 | 3 |
| EN | xxx | English Elective | 3 | 0 | 3 |
| # HU | 242 | Ethics and the Professional Helper | 3 | 0 | 3 |
| # HU | 298 | Human Service Practicum II | 2 | 8 | 4 |
| PY | 205 | Crisis Intervention | 3 | 0 | 3 |
| | | | | | 16 |
| | | **TOTAL CREDITS** | | | **67** |

## MENTAL HEALTH OPTION
## SECOND YEAR

| FALL SEMESTER | | | CL | LAB | CR |
|---|---|---|---|---|---|
| # MH | 195 | Mental Health Practicum I | 2 | 8 | 4 |
| MT | 120 | Contemporary College Mathematics* | 4 | 0 | 4 |
| PY | 220 | Human Growth and Development: The Life Span | 3 | 0 | 3 |
| # PY | 280 | Individual Counseling: Theory and Practice | 3 | 0 | 3 |
| XX | xxx | Humanities/Fine Arts/ Foreign Language Elective | 3 | 0 | 3 |
| | | | | | 17 |

| SPRING SEMESTER | | | | | |
|---|---|---|---|---|---|
| # AD | 235 | Physiology and Pharmacology of Addiction | 3 | 0 | 3 |
| EN | xxx | English Elective | 3 | 0 | 3 |
| # HU | 242 | Ethics and the Professional Helper | 3 | 0 | 3 |
| # MH | 298 | Mental Health Practicum II | 2 | 8 | 4 |
| PY | 205 | Crisis Intervention | 3 | 0 | 3 |
| | | | | | 16 |
| | | **TOTAL CREDITS** | | | **67** |

\# *Indicates major field courses*

* *Students must complete MT 120 to graduate. Depending on results of assessment testing, students may be required to complete MT 103 prior to MT 120 (please note that MT 103 Algebra I - Part I, with a grade of "C" or higher, or the high school equivalent with a grade of "C" or higher, is the prerequisite for MT 120).*

***Health, Character and Technical Standards, see page 51.***

*Sobriety Statement* - The Human Service Department abides by the accepted national standard that recommends a minimum of two years of sobriety for any prospective trainee in the field of alcohol and other drug abuse counseling.

Though this curriculum is designed to be completed in the format listed, students may choose to take more time, depending on their individual circumstances. Students who anticipate taking more time to complete the program are *strongly encouraged to consult with their department head* at the time of registration each semester to ensure that prerequisite requirements are met and course selection is appropriate.

# Health, Technical and Character Standards

## Addiction Counseling and Human Service

*(see Program pages 49 & 50)*

The college must ensure that patients/clients are not placed in jeopardy by students during learning experiences. Therefore, students in practica, service learning and clinical experiences must demonstrate sufficient emotional stability to withstand the stresses, uncertainties, and changing circumstances that characterize patient/client care responsibilities. Furthermore, the student is expected to have the emotional stability required to exercise sound judgment, accept direction and guidance from a supervisor or faculty member and establish rapport and maintain sensitive interpersonal relationships with employees, customers and/or patients/clients and their families.

**Character Expectations**

- Human Service and Addiction Counseling students work closely with individuals of all ages in the field. Many of the practicum sites and potential employers will perform a background check through the New Hampshire Department of Safety as well as police and potential FBI checks. A student's driving record will also be examined and considered prior to acceptance of some practicum and employment opportunities. The student may be called upon to pay for the previously mentioned background checks, etc.
- Applicants who have been in difficulty with the law, depending upon the nature of the problem, may not be employable or even eligible for practica. Applicants need to discuss these issues in an interview or meeting, so that future goals will not be compromised.

**Health Consideration**

- All Human Service Majors will receive NHTI Health forms following acceptance. These forms must be completed, along with requested health physical exam and TB testing, prior to the start of classes. Each student is required to obtain NHTI Liability Insurance, starting in each academic year. The students will be billed directly. Students are also eligible to purchase Health Insurance through NHTI for their own health needs.

**Technical Standards**

Technical Standards have been established as guidance tools to inform program applicants of skills and standards necessary for successful completion of the Human Service programs. Any applicant who has concerns or questions regarding the Technical Standards is encouraged to contact the Department Head to discuss their individual issues. Students in the Human Service programs must be able to demonstrate:

- Ability to communicate verbally as a student in classes, and later as a professional in individual and group counseling situations;
- Sufficient verbal skills and language to: collaborate with a wide variety of helping professionals in clinical, societal and professional areas; deliver accurate and required information; and to search for information, e.g., questioning;
- Sufficient writing ability to formulate written assessment, charting notes, and reports, etc.;
- Ability to sustain cognitive integrity in areas of short- and long-term memory, areas of written documentation and follow-through of responsibilities;
- Ability to concentrate on the execution of treatment plans, assigned skills and tasks as well as the integration and communication of this work for both short and long term periods of time;
- Ability to work in settings that may lend themselves to frequent interruptions, immediate crisis response and role responsibility exchange;
- Ability to cope with a variety of stressors, including people-place occurrences, and demonstrate safe and required care for individuals and the workplace as a whole;
- Ability to secure transportation to practicum sites and classes;
- Ability to consistently attend and participate in classes;
- Ability to demonstrate and maintain organizational skills, time management and professional respect and conduct as a human service student, either at a practicum site, or in the community;
- Ability to adhere to and practice the Human Service Department's ethical guidelines.

# JUSTICE/LEGAL STUDIES

## Criminal Justice

The Criminal Justice degree is designed to prepare students for careers in police work and corrections, in addition to serving as the basis to transfer on to complete a baccalaureate degree. For those already in service the program provides educational progress for promotion and other career development purposes. The degree of Associate in Science with a major in Criminal Justice will be awarded upon completion of all requirements.

NHTI has transfer affiliations with four year institutions including:

- Granite State College (dual admission program)
- Franklin Pierce College
- NH Police Standards and Training
- Plymouth State University
- Southern New Hampshire University
- University of Massachusetts-Lowell
- Western New England College
- Westfield State College

Please refer to *page 83* for suggestions on transferring to other institutions.

### FIRST YEAR

| FALL SEMESTER | | | CL | LAB | CR |
|---|---|---|---|---|---|
| # CJ | 101 | Introduction to the Criminal Justice System | 3 | 0 | 3 |
| # CJ | 121 | Criminal Procedure | 4 | 0 | 4 |
| EN | 101 | English Composition | 4 | 0 | 4 |
| IT | 102 | PC Applications | 3 | 0 | 3 |
| PY | 105 | Introduction to Psychology | 3 | 0 | 3 |
| | | | | | 17 |
| **SPRING SEMESTER** | | | | | |
| #CJ | 123 | Criminal Law | 4 | 0 | 4 |
| # CJ | 210 | Juvenile Justice Administration | 3 | 0 | 3 |
| EN | 120 | Communications OR | | | |
| EN | xxx | English Elective | 3-4 | 0 | 3-4 |
| PS | 220 | Public Administration | 3 | 0 | 3 |
| SO | 105 | Introduction to Sociology | 3 | 0 | 3 |
| | | | | | 16-17 |

### Alumni Profile

**Peter Maes**
**Major: Criminal Justice**
**Class of 2005**
**Former President: NHTI Drama Club**

*"My goal is to have a career in the federal law enforcement area, and I came to NHTI to get the first two years of my college education as a criminal justice major … and to be involved in campus activities that are fun and round out the college experience. Drama and acting have always been a big part of my life, and the NHTI Drama Club allowed me to continue that interest."*

### SECOND YEAR

| FALL SEMESTER | | | CL | LAB | CR |
|---|---|---|---|---|---|
| # CJ | 150 | Criminology | 3 | 0 | 3 |
| # CJ | 205 | Police Operations | 3 | 0 | 3 |
| # CJ | 215 | Corrections Operations | 3 | 0 | 3 |
| # CJ | 270 | Criminal Justice Internship* ***or*** | 0 | 9 | 3 |
| # CJ | 275 | Senior Project | 3 | 0 | 3 |
| MT | 120 | Contemporary College Mathematics** | 4 | 0 | 4 |
| PY | 205 | Crisis Intervention | 3 | 0 | 3 |
| | | | | | 16-19 |
| **SPRING SEMESTER** | | | | | |
| BI | 120 | Human Biology | 3 | 2 | 4 |
| # CJ | 225 | Drug Abuse and the Law | 3 | 0 | 3 |
| # CJ | 230 | Justice and the Community | 3 | 0 | 3 |
| # CJ | 270 | Criminal Justice Internship* ***or*** | 0 | 9 | 3 |
| # CJ | 275 | Senior Project | 3 | 0 | 3 |
| PI | 242 | Contemporary Ethical Issues | 3 | 0 | 3 |
| XX | xxx | General Elective | 3 | 0 | 3 |
| | | | | | 16-19 |
| | | **TOTAL CREDITS** | | | **68-69** |

\# *Indicates major field courses.*

* *May be taken either Fall or Spring semester of senior year.*

** *Students must complete MT 120 to graduate. Depending on results of assessment testing, students may be required to complete MT 103 prior to MT 120 (please note that MT 103 Algebra I - Part I, with a grade of "C" or higher, or the high school equivalent with a grade of "C" or higher, is the prerequisite for MT 120).*

**Health and Internship Considerations**

Applicants should be aware of the basic health and fitness requirements for many careers in the criminal justice field. Prospective students with special needs or limitations that may affect their internship placement and/or potential employability are encouraged to discuss their career goals during the interview with department member prior to admission.

The college must ensure that individuals (customers, employees, etc.) at internship and service learning sites are not adversely affected by students during learning experiences. Therefore, students participating in internship and field experiences must demonstrate the emotional stability required to exercise sound judgment, accept direction and guidance from a supervisor or faculty member and establish rapport and maintain sensitive interpersonal relationships with employees, customers and clients.

**Character Expectations**

Applicants should be aware that background checks are completed by potential employers prior to obtaining any position with arrest or detention powers, and typically, even before being accepted for an internship. Applicants who have been in difficulty with the law may not be employable, or even eligible for an internship. Because future goals may be compromised, applicants are advised to discuss any concerns with the Co-Department Heads.

### Specific Admission Requirements

1. Please refer to starred** statement on this page regarding mathematics graduation requirement.

Though this curriculum is designed to be completed in the format listed, students may choose to take more time, depending on their individual circumstances. Students who anticipate taking more time to complete the program are *strongly encouraged to consult with their department head* at the time of registration each semester to ensure that prerequisite requirements are met and course selection is appropriate.

# Paralegal Studies

The Associate Degree in Paralegal Studies, approved by the American Bar Association, will prepare students to perform effectively in today's legal and business communities. This program is an expanded version of the Certificate Program. Both programs are approved by the American Bar Association. The degree program trains men and women for professional status as lawyers' assistants in banks, corporations, government agencies, insurance companies, and law firms. The program provides students with a broad-based academic curriculum, which emphasizes the skills, substantive knowledge and ethics a paralegal needs to assist lawyers effectively. Graduates may either enter the work force directly after graduation or continue their education at a four-year institution.

The Associate Degree in Paralegal Studies can be completed on a full- or part-time basis. Most major field courses, however, are offered in the evenings at this time. The general education courses are offered both days and evenings. The degree of Associate in Science with a major in Paralegal Studies will be awarded upon successful completion of all program requirements.

## FIRST YEAR

| FALL SEMESTER | | | CL | LAB | CR |
|---|---|---|---|---|---|
| EN | 101 | English Composition | 4 | 0 | 4 |
| IT | 102 | PC Applications | 3 | 0 | 3 |
| # PL | 106 | Introduction to Legal Studies | 3 | 0 | 3 |
| # PL | 107 | Contracts and Torts | 3 | 0 | 3 |
| PY | 105 | Introduction to Psychology | 3 | 0 | 3 |
| | | | | | 16 |

| SPRING SEMESTER | | | | | |
|---|---|---|---|---|---|
| AC | 101 | Accounting I | 3 | 0 | 3 |
| EN | 120 | Communications OR | | | |
| EN | xxx | English Elective | 3-4 | 0 | 3-4 |
| MT | 123 | Intermediate Algebra | 3 | 0 | 3 |
| # PL | 110 | Litigation and Trial Preparation | 3 | 0 | 3 |
| # PL | 221 | Real Estate | 3 | 0 | 3 |
| | | | | | 15-16 |

## NHTI Faculty Profile

**Stacey Peters**
*Department Head, Paralegal Studies*

B.A., Alfred University
Certificate Paralegal Studies,
Rivier College

Professor Stacey Peters has been teaching in NHTI's Paralegal Studies program for more than ten years and has recently been named department head for the program. She has fifteen years of experience as a practicing paralegal.

*"There is a high demand in the job market for qualified paralegals. NHTI offers the only degree and certificate programs in New Hampshire that are approved by the American Bar Association. Every member of our faculty is a working paralegal or practicing attorney and our internship program offers students valuable hands-on experience in the courts, with state agencies and in private law practices."*

## SECOND YEAR

| FALL SEMESTER | | | CL | LAB | CR |
|---|---|---|---|---|---|
| AC | 102 | Accounting II | 3 | 0 | 3 |
| PI | 242 | Contemporary Ethical Issues | 3 | 0 | 3 |
| # PL | 225 | Legal Research and Writing | 3 | 2 | 4 |
| # PL | 251 | Probate Estates and Trusts | 3 | 0 | 3 |
| # PL | 262 | Criminal Law and Procedures | 3 | 0 | 3 |
| | | | | | 16 |

| SPRING SEMESTER | | | | | |
|---|---|---|---|---|---|
| FL | xxx | Foreign Language ***or*** | 3 | 0-2 | 3-4 |
| XX | xxx | General Education Elective | 3 | 0 | 3 |
| # PL | 231 | Business Organizations & Bankruptcy | 3 | 0 | 3 |
| # PL | 242 | Domestic Relations Law | 3 | 0 | 3 |
| # PL | 270 | Internship/Seminar | 0 | 9 | 3 |
| XX | xxx | Science Elective* | 3 | 0 | 3 |
| XX | xxx | Social Science Elective** | 3 | 0 | 3 |
| | | | | | 18-19 |

**TOTAL CREDITS** **65-67**

\# *Indicates major field courses.*
* *BI 100, CH 100 and PH 100 do not meet this requirement.*
** *Any course with a prefix of AN, EO, HI, PS, PY or SO*

## Specific Admission Requirements

1. College preparatory algebra I with a grade of "C" or higher **or** NHTI's MT 103 **and** MT 104 both with grades of "C" or higher
2. Interview with department head; interviews will be scheduled by the department head once applications are complete
3. Two confidential letters of reference
4. Two-hundred word essay regarding reasons for choosing the Paralegal Program (used to help evaluate writing skills)

### Internship Considerations

The college must ensure that individuals (customers, employees, etc.) at internship and service learning sites are not adversely affected by students during learning experiences. Therefore, students participating in internship and field experiences must demonstrate the emotional stability required to exercise sound judgment, accept direction and guidance from a supervisor or faculty member and establish rapport and maintain sensitive interpersonal relationships with employees, customers and clients.

### Character Expectations

Applicants should be aware that background checks are completed by potential employers prior to obtaining any position with arrest or detention powers, and typically, even before being accepted for an internship. Applicants who have been in difficulty with the law may not be employable, or even eligible for an internship. Because future goals may be compromised, applicants are advised to discuss any concerns with the Department Head.

JUSTICE LEGAL

Though this curriculum is designed to be completed in the format listed, students may choose to take more time, depending on their individual circumstances. Students who anticipate taking more time to complete the program are *strongly encouraged to consult with their department head* at the time of registration each semester to ensure that prerequisite requirements are met and course selection is appropriate.

# LIBERAL ARTS

## Associate in Arts in Liberal Arts

The Liberal Arts curriculum provides students with broad general knowledge and skills in the Arts and Sciences. It is designed to provide a basis for transfer to four-year liberal arts programs at other colleges and universities. Students may select courses based on the requirements of the four- year school to which they plan to transfer. Students who have not yet decided on an intended field of specialization may wish to begin with the general curriculum; concentrations in English, the life sciences, and the social sciences are also available. The degree of Associate in Arts in Liberal Arts will be awarded upon successful completion of all program requirements.

### Specific Admission Requirements

1. One year of college preparatory mathematics (Algebra I) with a grade of "C" or higher or NHTI's MT 103 and MT 104 both with grades of "C" or higher.

## Liberal Arts and Sciences Option

| General Requirements | Credits |
|---|---|
| EN 101 English Composition | 4 |
| EN xxx English Elective [excluding EN 100 and EN 120] | 3 |
| Computer Literacy (IT 102 or equivalent) | 3 |
| GS 100 General Studies Seminar | 1 |
| Humanities (XX xxx Humanities/Fine Arts/ Foreign Language Elective) | 9 |
| Mathematics MT 123 Intermediate Algebra ***or*** higher level math course AND MT xxx | 8-9 |
| Science (with lab) [excluding BI 100, CH 100, and PH 100] | 8 |
| Social Sciences (three courses with AN, EO, HI, PS, PY, or SO prefix, excluding HI 104 and HI 105) | 9 |
| | **45-46** |
| **Arts and Science Electives** | **15** |
| Courses selected from Humanities (Literature, Western Civilization, Fine Arts, Foreign Languages, Philosophy), Mathematics, Sciences, Social Sciences, and English | |
| **General Electives** | **6** |
| Courses to meet individual interests and goals | |

**Minimum of 64 credits required for Graduation**

***Note:*** *a minimum of 16 credits hours must be earned through instruction at NHTI with a minimum of 8 credit hours in courses numbered at the 200-level.*

## English Option

| General Requirements | Credits |
|---|---|
| EN 101 English Composition | 4 |
| EN 1xx English Elective [excluding EN 100 and EN 120] | 3 |
| Computer Literacy (IT 102 or equivalent) | 3 |
| GS 100 General Studies Seminar | 1 |
| Humanities HI 104 Western Civilization I ***and*** HI 105 Western Civilization II ***and*** XX xxx Humanities/Fine Arts/ Foreign Language Elective | 9 |
| Mathematics MT 123 Intermediate Algebra ***or*** higher level math course AND MT xxx | 8-9 |
| Science (with lab) [excluding BI 100, CH 100, and PH 100] | 8 |
| Social Sciences (three courses with AN, EO, HI, PS, PY, or SO prefix, excluding HI 104 and HI 105) | 9 |
| | **45-46** |
| **Concentration** | |
| EN 1xx Introductory Genre courses | 6 |
| EN 2xx and 2xx Sequential Survey Courses | 6 |
| EN 255 Shakespeare | 3 |
| EN 2xx Upper level electives | 6 |
| | **21** |

**Minimum of 64 credits required for Graduation**

***Note:*** *a minimum of 16 credits hours must be earned through instruction at NHTI with a minimum of 8 credit hours in courses numbered at the 200-level.*

### NHTI Faculty Profile

**Deborah A. Holland**
*Department Head, Liberal Arts, General Studies and Health Science*
A.B., Mount Holyoke College
M.A., University of NH

Professor Holland began teaching English at NHTI in 1979 and was named Department Head of the Associate in Science in General Studies program in 1985. She has also been Department Head of the Associate in Arts program since its inception in 1997.

*"The many-sided nature of my position allows me to do what I enjoy most at NHTI - interact with students as both instructor and advisor. It's a pleasure to help students plan and attain their academic and professional goals through the many options of the Associate in Science in General Studies and Associate in Arts programs."*

Though this curriculum is designed to be completed in the format listed, students may choose to take more time, depending on their individual circumstances. Students who anticipate taking more time to complete the program are *strongly encouraged to consult with their department head* at the time of registration each semester to ensure that prerequisite requirements are met and course selection is appropriate.

## NHTI Faculty Profile

**Mary Lloyd Evans**

*Associate Professor, General Studies and Mathematics*

B.S., University of Wales/Swansey

P.G.C.E., University of Birmingham, England

M.S., Lesley College

Mary Lloyd Evans came to NHTI in 1997 as an adjunct faculty member teaching math courses while also assisting in the Learning Center. She became a full-time associate professor in 2000. Before coming to NHTI she had spent 20 years teaching and coaching at several private schools in Massachusetts and New Hampshire.

*"I really enjoy the camaraderie amongst the mathematics and general studies faculty and I appreciate the respect afforded to me by the students here. I feel NHTI provides wonderful opportunities for students of all ages to learn and find success."*

## Life Sciences Option

| General Requirements | Credits |
|---|---|
| EN 101 English Composition | 4 |
| EN xxx English Elective [excluding EN 100 and EN 120] | 3 |
| Computer Literacy (IT 102 or equivalent) | 3 |
| GS 100 General Studies Seminar | 1 |
| Humanities (XX xxx Humanities/Fine Arts/ Foreign Language Electives) | 9 |
| Mathematics MT 123 Intermediate Algebra ***or*** higher level math course | 4 |
| Social Sciences (three courses with AN, EO, HI, PS, PY, or SO prefix, excluding HI 104 and HI 105) | 9 |
| | **33** |

| Concentration | |
|---|---|
| MT 251 Statistics | 4 |
| BI 111 & BI 112 General Biology I & II | 8 |
| CH 103 & CH 104 General Chemistry I & II | 8 |
| | **20** |
| *Three of the following:* | |
| BI 195 Anatomy and Physiology I | 4 |
| BI 196 Anatomy and Physiology II | 4 |
| BI 202 Microbiology | 4 |
| BI 159 Personal Nutrition | 4 |
| BI 259 Normal & Therapeutic Nutrition | 4 |
| BI 279 Life Cycle Nutrition | 3 |
| BI 2xx Biology Elective | 3-4 |
| CH 120 Forensic Science | 4 |
| CH 2xx Chemistry Elective | 3-4 |
| | **11-12** |
| **General Electives** | |
| Courses to meet individual goals | **3** |
| **Minimum of 64 credits required for Graduation** | |

***Note:*** *a minimum of 16 credits hours must be earned through instruction at NHTI with a minimum of 8 credit hours in courses numbered at the 200-level.*

## Social/Behavioral Science Option

| General Requirements | Credits |
|---|---|
| EN 101 English Composition | 4 |
| EN xxx English Elective (excluding EN 100 and EN 120) | 3 |
| GS 100 General Studies Seminar | 1 |
| IT 102 PC Applications | 3 |
| MT 123 Intermediate Algebra (or higher level math course) | 4 |
| MT 251 Statistics | 4 |
| XX xxx Humanities/Fine Arts/ Foreign Language Electives | 9 |
| XX xxx Laboratory Science (excluding BI 100, CH 100 and PH 100) | 8 |
| | **36** |

| Core Requirements | |
|---|---|
| AN 101 Introduction to Cultural Anthropology | 3 |
| EO 101 Macroeconomics ***or*** | |
| EO 102 Microeconomics | 3 |
| HI 120 United States History to 1870 ***or*** | |
| HI 121 United States History, 1870- Present ***or*** | |
| HI xxx Introductory history course | 3 |
| PS xxx Political Science elective | 3 |
| PY 105 Introduction to Psychology | 3 |
| SO 105 Introduction to Sociology | 3 |
| | **18** |

**Core Electives**

Three additional courses selected from the following areas: anthropology, history, political science, psychology or sociology **9**

**General Electives** **3**

**Minimum of 64 credits required for Graduation**

***Note:*** *a minimum of 16 credits hours must be earned through instruction at NHTI with a minimum of 8 credit hours in courses numbered at the 200-level.*

# General Studies

The General Studies Program provides maximum flexibility for those seeking to begin or to continue their higher education. This program, in which students may design their own curriculum, is especially appealing to those who have unique career or academic goals. The degree of Associate in Science in General Studies will be awarded upon successful completion of all program requirements.

General Studies might be right for you if you:

- Would like to custom-design a degree program which meets your goals;
- Have previously earned credits from one or more institutions;
- Would like to combine one of our certificates (Paralegal, Accounting, Management, etc.) with other required credits to complete the degree;
- Seek entry into an NHTI program which has limited enrollment or for which you need prerequisite courses; although transfer into these programs is not guaranteed, students who are successful in the General Studies program strengthen their candidacy status; *please refer to page 79 for details regarding the process for requesting a change of program;*
- Plan to transfer to another institution but would like to complete some of the general education requirements;
- Would like to gain as many as 20 experiential learning credits for your occupational experience;
- Wish to explore the college experience without a definite career path in mind.

## General Education Core

*(for both options)*

| | | Credits |
|---|---|---|
| A. | EN 101 English Composition | 4 |
| B. | Social Sciences (two courses with AN, EO HI, PS, PY, or SO prefix, excluding HI 104 and HI 105) | 6 |
| C. | Mathematics* (MT 120 or higher) | 4 |
| D. | Science (one science course with or without a lab) [excluding BI 100, CH 100, and PH 100] | 3-4 |
| E. | Humanities (EN xxx [excluding EN 100 and EN 120] and XX xxx Humanities/Fine Arts/ Foreign Language Elective) | 6 |
| | **TOTAL** | **23-24** |

## Other Required Courses

*(for both options)*

| | | |
|---|---|---|
| A. | Computer Literacy (IT 102 or equivalent) | 3 |
| B. | General Elective | 3 |
| | **TOTAL** | **6** |

## Exploration Option

The General Studies Exploration curriculum provides students with broad general knowledge as well as an opportunity to explore an area of concentration. It allows flexibility for students who either have transfer credit or who wish to transfer to another two or four-year program. While students may custom-design their concentration area, they should select these electives based on their intended fields of specialization.

| | | Credits |
|---|---|---|
| A. | GS 100 General Studies Seminar | 1 |
| B. | Liberal Arts and Sciences electives | 12 |
| C. | Electives (courses to meet individual interests and goals; may include a certificate program) | 23-24 |
| | **TOTAL** | **36-37** |
| | **TOTAL CREDITS** | **64-67** |

## Experiential Credit Option

The Experiential Credit option is for individuals who would like to earn as many as 20 experiential credits for previous occupational experience. It is also possible to complete a certificate program for inclusion in this option. The experiential credit, whether combined with a certificate or with coursework in a specific subject area, must relate to and support the student's chosen subject concentration; it may or may not be transferable.

| | | | Credits |
|---|---|---|---|
| A. | GS 101 Assessment of Prior Learning | | 1 |
| B. | Experiential Credit ** | maximum | 20 |
| C. | Certificate in a specific program area ** *(must relate to experiential credit)* | | |
| | **And/Or** | | |
| D. | Coursework in a specific subject area ** *(must relate to experiential credit)* | minimum | 15 |
| | **TOTAL** | | **36** |
| | **TOTAL CREDITS** | | **64-66** |

* *Students must complete MT 120 to graduate. Depending on results of assessment testing, students may be required to complete MT 103 prior to MT 120 (please note that MT 103 Algebra I - Part I, with a grade of "C" or higher, or the high school equivalent with a grade of "C" or higher, is the prerequisite for MT 120).*

** *If the combination of experiential credit and certificate program courses totals less than 35 credits, additional coursework must relate to the concentration subject area and must be approved by the General Studies department head.*

*Note: a minimum of 16 credits hours must be earned through instruction at NHTI with a minimum of 8 credit hours in courses numbered at the 200-level.*

### Specific Admission Requirements

1. Please refer to starred* statement on this page regarding mathematics graduation requirement.

Though this curriculum is designed to be completed in the format listed, students may choose to take more time, depending on their individual circumstances. Students who anticipate taking more time to complete the program are *strongly encouraged to consult with their department head* at the time of registration each semester to ensure that prerequisite requirements are met and course selection is appropriate.

# CLINICAL, INTERNSHIP AND PRACTICUM SITES

*The following lists, by program, are representative of sites that currently serve or have served as clinical, internship or practicum opportunities for NHTI students.*

## DIAGNOSTIC MEDICAL SONOGRAPHY SITES

Concord Hospital, Concord, NH
Cottage Hospital, Woodsville, NH
Dartmouth-Hitchcock Medical Center, Lebanon, NH
Frisbie Memorial Hospital, Rochester, NH
H.D. Goodall Hospital, Sanford, ME
Hitchcock Clinic, Manchester, NH
Hitchcock Clinic, Nashua, NH
Maine Medical Center, Portland, ME
Monadnock Community Hospital, Peterborough, NH
Parkland Medical Center, Derry, NH
Southern Maine Medical Center, Biddeford, ME
Wentworth Douglass Hospital, Dover, NH
York Hospital, York, ME

## PARAMEDIC EMERGENCY MEDICINE *PREPARATION TRACK* BASIC LIFE SUPPORT CLINIC SITES

Rockingham Ambulance, Manchester, NH
Rockingham Ambulance, Nashua, NH
Trinity Ambulance, Haverhill, MA
Trinity Ambulance, Lowell, MA

## PARAMEDIC EMERGENCY MEDICINE ALS FIELD SITES

Derry Fire Department, Derry, NH
Greater Lowell EMS, Lowell, MA
Lawrence General Hospital ALS, Lawrence, MA
New Britain Emergency Medical Service, New Britain, CT
Rockingham Ambulance, Manchester, NH
Rockingham Ambulance, Nashua, NH
Salem Fire Department, Salem, NH
Trinity EMS, Inc., Haverhill, MA

## PARAMEDIC EMERGENCY MEDICINE HOSPITAL CLINIC SITES

Catholic Medical Center, Manchester, NH
Concord Hospital, Concord, NH

### NHTI Alumni Profile

**Diane Davis**
**Class of 2004**

**Major:** Nursing

Diane is employed as a staff nurse at Concord Hospital.

*"Being a fulltime adult student in the nursing program at NHTI was an enriching experience for me. The faculty is extremely supportive and the community college environment at NHTI is conducive to learning. My involvement with the Student Nurses' Association as a member and in my senior year as president, greatly enhanced my nursing education. Through NHTI and the Student Nurses' Association, I developed some great relationships with faculty members and my peers."*

Elliot Hospital, Manchester, NH
Lowell General Hospital, Lowell, MA
Parkland Medical Center, Derry, NH
St. Joseph Hospital, Nashua, NH
Saints Memorial Hospital, Lowell, MA
Southern New Hampshire Medical Center, Nashua, NH

## RADIOGRAPHY HOSPITAL CLINIC SITES

Adroscoggin Hospital, Berlin, NH
Catholic Medical Center, Manchester, NH
Cheshire Medical Center, Keene, NH
Concord Hospital, Concord, NH
Cottage Hospital, Woodsville, NH
Dartmouth-Hitchcock Medical Center, Lebanon, NH
Elliot Hospital, Manchester, NH
Exeter Hospital, Exeter, NH
Franklin Regional Hospital, Franklin, NH
Frisbie Memorial Hospital, Rochester, NH
Huggins Hospital, Wolfeboro, NH
Lakes Region General Hospital, Laconia, NH
Littleton Regional Hospital, Littleton, NH
Massachusetts General Hospital, Boston, MA
Memorial Hospital, North Conway, NH
Monadnock Community Hospital, Peterborough, NH
Mount Ascutney Hospital, Windsor, VT
New London Hospital, New London, NH
Parkland Medical Center, Derry, NH
Portsmouth Regional Hospital, Portsmouth, NH
St. Joseph Hospital, Nashua, NH
Southern New Hampshire Medical Center, Nashua, NH
Speare Memorial Hospital, Plymouth, NH
VA Medical Center, Manchester, NH
VA Medical Center, White River Junction, VT
Weeks Medical Center, Lancaster, NH
Wentworth-Douglass Hospital, Dover, NH

## RADIATION THERAPY CLINICAL SITES

Exeter Cancer Center, Exeter, NH
Payson Cancer Center, Concord, NH
Seacoast Cancer Center, Dover, NH
Nashua Regional Cancer Center, Nashua, NH
The Kingsbury Center for Cancer Care, Keene, NH
Norris Cotton Cancer Center, Lebanon, NH
Elliot Regional Cancer Center, Manchester, NH

## NURSING PRACTICUM SITES

Catholic Medical Center, Manchester, NH
Concord Hospital, Concord, NH
Elliot Hospital, Manchester, NH
Greenbriar Terrace, Nashua, NH
Hanover Hill Healthcare Center, Manchester, NH
Havenwood-Heritage Heights, Concord, NH
Healthsouth Rehabilitation Hospital, Concord, NH
Lakes Region General Hospital, Laconia, NH
New Hampshire Hospital, Concord, NH
NH Veterans' Home, Tilton, NH

***Child and Family Development Center, located on the campus of NHTI***

## EARLY CHILDHOOD EDUCATION PRACTICUM SITES

Applewood Learning Center, Londonderry, NH
Beaver Meadow School, Concord, NH
Boscawen Elementary School, Boscawen, NH
Bow Elementary School, Bow, NH
Child and Family Development Center, NHTI, Concord, NH
Children's Center, Inc., Londonderry, NH
Children's World Learning Center, Merrimack, NH
Concord Head Start, Concord, NH
Dame School, Concord, NH
Dewey School, Concord, NH
Early Enrichment Center, Concord, NH
Eastman School, Concord, NH
East Side Learning Center, Concord, NH
Franklin Head Start, Franklin, NH
Harold Martin School, Hopkinton, NH
Kimball Elementary School, Concord, NH
The Learning Center at Concord Hospital, Concord, NH
Montessori Learning Center, Pembroke, NH
New Durham Elementary School, New Durham, NH
Plymouth Elementary School, Plymouth, NH
Proctor Preschool, Andover, NH
Ralph Waldo Emerson Preschool, Concord, NH
Rumford School, Concord, NH
St. Paul's School Children's Learning Center, Concord, NH
The Children's Place and Family Resource Center, Concord, NH
Toll House Preschool, Merrimack, NH
Underhill Elementary School, Hooksett, NH
White Birch Community Center, Child Care, Henniker, NH
Woodside Preschool and Child Care, Concord, NH

## HUMAN SERVICE/MENTAL HEALTH PRACTICUM SITES

Boscawen Elementary School, Boscawen, NH
Bow School System, Bow, NH
Bureau of Substance Abuse Services, Concord, NH
CASA, Manchester, NH
Child and Family Services Group Home, Concord, NH
Child and Family Services of New Hampshire
The Children's Place, Concord, NH
Community Bridges, Bow, NH
Community Services Councils – Concord and Laconia, NH
Concord Boys and Girls Club, Concord, NH
Concord City Human Services
Concord Hospital - Therapeutic Activities Center, Concord, NH
Concord Housing Authority, Concord, NH
Division for Children, Youth and Families, Concord, Rochester, Nashua
Fellowship Housing Opportunities, Concord, NH
Greater Manchester Mental Health
Havenwood Heritage Heights, Concord, NH
Immaculate Heart of Mary Children's Center, Concord, NH
Laconia Housing Authority, Laconia, NH
Merrimack County Adult Diversion Program, Concord, NH
Merrimack County Juvenile Diversion Program
Merrimack County Visitation Program, Concord, NH
Merrimack Valley Middle School and High School
New Hampshire Brain Injury Association, Concord, NH
New Hampshire Department of Corrections
New Hampshire Division of Alcohol and Drug Abuse Prevention and Recovery
New Hampshire Division of Health and Human Service, Concord
New Hampshire Hospital, Concord, NH
New Hampshire Mediation Program, Concord, NH
NH HelpLine, Concord, NH
NH State Prison for Women, Goffstown, NH
New Horizons Shelter, Manchester, NH
Odd Fellows Home, Concord, NH
Penacook Community Center, Penacook, NH
Pine Haven Center for Boys, Allenstown, NH
Pleasant View Eldercare, Concord, NH
Rape and Domestic Violence Crisis Center, Concord, NH
Riverbend Community Mental Health, Concord, NH
Rochester Parent Child Center, Rochester, NH
Rolfe and Rumford Home, Concord, NH
Second Start, Concord, NH
Spaulding Youth Center, Northfield, NH
Speare Memorial Hospital - Social Work Department, Plymouth, NH
The Friends Program, Concord, NH
Tobey School, Concord, NH
Walker School, Concord, NH
Wedico Center, Windsor, NH
West High School, Manchester, NH
Whole Village Child Care, Plymouth, NH
WIC Program, Concord, NH

## ADDICTION COUNSELING PRACTICUM SITES

Alcohol Drug Intervention, Concord, NH
Counseling Center of Newport, Newport, NH
Division of Alcohol and Drug Abuse Prevention and Recovery, Concord, NH
Farnum Center, Manchester, NH
Friendship House, Bethlehem, NH
Hampstead Hospital, Hampstead, NH
Headrest, Lebanon, NH
Horizon Counseling Center, Gilford, NH
Keystone Hall, Nashua, NH

Lakes Region General Hospital, Nathan Brody Chemical Dependency Program, Laconia, NH
Merrimack Academy, Boscawen, NH
Merrimack County Jail, Boscawen, NH
NH State Prison for Women, Goffstown, NH
Optima Health CMC, Manchester, NH
Prospects at Stratford Guidance, Rochester, NH
Riverway Center for Recovery, Manchester, NH
Serenity House, Manchester, NH
South Eastern Services, Dover, NH
Summit Program for Women (Dept. of Corrections), Laconia, NH
Tirrell Halfway House, Manchester, NH
VA Medical Center, Manchester, NH

## TRAVEL AND TOURISM/HOTEL ADMINISTRATION INTERNSHIP SITES

American Automobile Association (AAA), Concord, NH
American Automobile Association (AAA), Manchester, NH
Apollo Travel Services, Concord, NH
Comfort Inn, Concord, NH
Continental Airlines, Manchester, NH
Fairfield Inn, Merrimack, NH
Hampton Inn, Concord, NH
Holiday Inn, Concord, NH
Horizons Unlimited Travel, Danvers, MA
Ramada Inn, Manchester, NH
State of New Hampshire Department of Tourism, Concord, NH
Walt Disney World, Orlando, FL
Yellowstone National Park, Wyoming

## CRIMINAL JUSTICE INTERNSHIP SITES

CASA of New Hampshire
DCYF Juvenile Services
Merrimack County Attorney's Office
Merrimack County Juvenile Diversion
NH Department of Corrections
NH Division of Children Youth and Families
NH Fish and Game Department
NH Prison for Women
NH Public Defender's Office
NH State Police
NH State Prison for Women
NH State Prison Volunteers
NH Youth Detention Center
Tobey School
US Probation Office
Victims Inc.

**New Hampshire Police Departments**

Antrim
Amherst
Ashland
Auburn
Bedford
Berlin
Boscawen
Bow
Bradford
Brookline
Campton
Candia
Lincoln
Litchfield
Littleton
Londonderry
Loudon
Manchester
Mason
Meredith
Milford
Moultonboro
Nashua
Newport

*"New Hampshire Technical Institute's challenging Criminal Justice curriculum, motivated faculty, and individual academic advising prepared me for my career in Law Enforcement."*

~ NH State Trooper/ NHTI Graduate Chuck Johnston

Claremont
Concord
Deerfield
Derry
Dover
Epping
Exeter
Franklin
Fremont
Gilford
Goffstown
Gorham
Grantham
Hanover
Hampton
Henniker
Hillsboro
Hollis
Hooksett
Hopkinton
Hudson
Laconia
North Hampton
Northfield
Nottingham
Ossipee
Pembroke
Plaistow
Plymouth
Portsmouth
Raymond
Rochester
Salem
Sanbornton
Sandown
Somersworth
Sutton
Swanzey
Tilton
Thornton
Washington
Weare
Windham
Woodstock

**New Hampshire Sheriff's Departments**

Carroll County
Grafton County
Hillsborough County
Merrimack County

**New Hampshire Department of Corrections**

Cheshire County
Coos County
Hillsborough County
Rockingham County

# CERTIFICATE PROGRAMS

NHTI Certificate Programs are designed to prepare students for immediate employment in a variety of exciting fields. The Certificate Programs can help students attain their career goals in a short period of time (**some programs require as few as four to six courses!**). These Programs also provide opportunities to continue on to obtain an associate degree in the same or related field of study.*****

Some of the advantages of enrolling in a program instead of remaining in non-matriculated status include:

1. potential eligibility for financial aid;******
2. academic counseling to help students plan the next step in their education and/or career; and
3. students will receive certificates promptly after successful completion of their program.

The programs listed in this brochure are available days and/or evenings as noted. To apply for a program, simply complete and submit the certificate application, located in the back of this brochure, together with a $10.00 non-refundable application fee, to the Admissions Office. *Be sure to review the certificate program listing for additional documents that may be required.* More specific information can be obtained by calling the Admissions Office, the individual indicated on the program page or Continuing Education.

***Please note:*** *students must apply for and be accepted into a program to receive their degree, diploma or certificate.*

* *Contact the Admissions Office for additional information. Students who choose to apply for an Associate Degree upon completion of the Certificate program will not be charged another application fee.*

** *To be considered for Financial Aid, students must be enrolled in a program of 16 credits or more, submit high school transcripts, GED certificate and scores (if applicable) and the Program application, and submit appropriate documents as required by the Financial Aid Office.*

**CERTIFICATE PROGRAM RESIDENCY REQUIREMENT**

To earn a Certificate, 6 credits, or 25%, whichever is larger, of the program credits must be taken in NHTI-controlled courses.

## Business Programs

### Accounting Basic

The basic accounting certificate is designed to provide students with specific accounting, computer and related business skills for entry into business or industry. Upon completion of the basic accounting certificate, students will have sufficient skills to obtain jobs as accounts receivable clerks, accounts payable clerks, accounting technicians, bookkeepers or payroll clerks. For more information, contact Lynn Hedge at 603-271-6965. This program is available days and evenings. This program is "financial aid eligible."

| | | | Credits |
|---|---|---|---|
| AC | 101 | Accounting I | 3 |
| AC | 102 | Accounting II | 3 |
| BU | 101 | Introduction to Business | 3 |
| BU | 225 | Business Law | 3 |
| IT | 102 | PC Applications | 3 |
| IT | 200 | Spreadsheets | 3 |
| | | **TOTAL PROGRAM CREDITS** | **18** |

### Accounting Advanced

The advanced accounting certificate is designed to build upon the skills learned in the basic accounting certificate. Upon completion of the advanced accounting certificate, students will have sufficient skills to obtain jobs as full-charge bookkeepers or junior accountants. *The Basic Accounting Certificate must be successfully completed in order to receive the Advanced Accounting Certificate.*

Although students completing the advanced certificate will have the necessary background to perform the tasks of a full-charge bookkeeper or a junior accountant, students should be aware some employers will require the completion of an associate degree to be considered for employment in these job categories. For more information, contact Lynn Hedge at 603-271-6965. The advanced accounting certificate is available days and evenings. This program is "financial aid eligible."

| | | | Credits |
|---|---|---|---|
| AC | 205 | Intermediate Accounting I | 4 |
| AC | 206 | Intermediate Accounting II | 4 |
| AC | 230 | Taxes | 4 |
| AC | 250 | Cost Accounting | 3 |
| BU | 250 | Principles of Finance | 3 |
| BU | 270 | Principles of Management | 4 |
| | | **TOTAL PROGRAM CREDITS** | **22** |

*Prerequisite:* Applicants must submit proof of high school level Algebra I with a grade of "C" or higher or NHTI's MT 103 and MT 104 both with grades of "C" or higher.

### E-Travel

The Certificate program in E-Travel gives students the opportunity to combine the technical skills and tourism knowledge needed to work in a tourism organization's computer area. Specifically, students will develop the technical skills needed to design web sites for the tourism industry as well as an understanding of the industry as a whole. For more information contact Maryanne S. Adams at 603-271-6963. This program is available days and evenings. This program is "financial aid eligible."

| | | | Credits |
|---|---|---|---|
| GY | 135 | Destination Travel Geography I | 3 |
| GY | 137 | Destination Travel Geography II | 3 |
| IT | 102 | PC Applications | 3 |
| IT | 270 | Web Design and Development I | 3 |
| IT | 274 | Internet (Electronic) Commerce | 3 |
| TR | 101 | Introduction to the Hospitality and Tourism Industry | 3 |
| TR | 210 | E-Travel | 3 |
| | | **TOTAL PROGRAM CREDITS** | **21** |

## Event/Conference Management

The Certificate program in Event/Conference Management gives students the opportunity to acquire the skills needed to work in conference management at a hotel/conference, sports arena center or a corporate organization. Students will develop an understanding of the hotel/tourism industry and learn how to plan and organize a conference/event. For more information contact Maryanne S. Adams at 603-271-6963. This program is available days and evenings. This program is "financial aid eligible."

| | | Credits |
|---|---|---|
| TR 101 | Introduction to the Hospitality and Tourism Industry | 3 |
| HR 110 | Introduction to Hotal Operations | 3 |
| BU 225 | Business Law I ***or*** | |
| HR 227 | Legal Issues for the Hospitality Industry* | 3 |
| HR 245 | Event, Meeting and Convention Planning | 3 |
| HR 260 | Hospitality Sales and Marketing | 3 |
| HR 269 | Food and Beverage Management ***or*** | |
| TR 211 | Sports Tourism | 3 |
| | **TOTAL PROGRAM CREDITS** | **18** |

**HR 227 is offered only in the evening*

## Hotel Administration

The Hotel Administration program will prepare students for an entry-level position in the hotel industry. The student will explore the various types of positions and responsibilities as they relate to the size and needs of a Deluxe to Tourist Hotel, Inn, Lodge or Resort in relation to front office operations. Classroom instruction is completed by hands-on industry software training. Students will have the opportunity to take the American Hotel and Motel Association certification tests in Rooms Division and/or Marketing/Sales Specialist. For more information contact Maryanne S. Adams at 603-271-6963. This program is available evenings only. This program is "financial aid eligible."

| | | Credits |
|---|---|---|
| HR 110 | Introduction to Hotel Operations | 3 |
| HR 225 | Front Office Operations | 3 |
| HR 227 | Legal Issues for the Hotel Industry | 3 |
| HR 245 | Event, Meeting and Convention Planning | 3 |
| HR 260 | Hospitality Sales and Marketing | 3 |
| HR 269 | Food & Beverage Management | 3 |
| | **TOTAL PROGRAM CREDITS** | **18** |

## Human Resource Management

This certificate is offered for students who seek entry into the field of human resource management or for those who wish to upgrade their skills in their present positions. Practical applications to job situations will be stressed. For more information, contact Martha Hunt at 603-271-8880. This program is available evenings only. This program is "financial aid eligible."

| | | Credits |
|---|---|---|
| BU 101 | Introduction to Business | 3 |
| BU 150 | Supervision | 3 |
| BU 242 | Business Ethics | 3 |
| BU 245 | Organizational Behavior | 3 |
| BU 273 | Human Resource Management | 4 |
| | | **16** |
| *Choose one elective:* | | |
| BU 270 | Principles of Management | 4 |
| XX xxx | Elective *(should be career/specialty related)** | 3-4 |
| | | **3-4** |
| | **TOTAL PROGRAM CREDITS** | **19-20** |

** Approval by Department Head*

## Management

This certificate is designed for students who seek employment in a variety of management positions and for students who desire to increase their knowledge and update their skills for advancement with their present employer. For more information contact Martha Hunt at 603-271-8880. This program is available days and evenings. This program is "financial aid eligible."

| | | Credits |
|---|---|---|
| AC 101 | Accounting I | 3 |
| BU 101 | Introduction to Business | 3 |
| BU 150 | Supervision | 3 |
| BU 225 | Business Law I | 3 |
| BU 270 | Principles of Management | 4 |
| | | **16** |
| *Choose one elective:* | | |
| BU 242 | Business Ethics | 3 |
| BU 245 | Organizational Behavior | 3 |
| BU 273 | Human Resource Management | 4 |
| | | **3-4** |
| | **TOTAL PROGRAM CREDITS** | **19-20** |

## Marketing/Sales

This certificate is designed to make students eligible for responsible positions in marketing and sales through a practical course of study. The study of marketing relates to the performance of business activities that direct the flow of goods and services from producers to consumers. For more information contact Martha Hunt at 603-271-8880. This program is available days and evenings. This program is "financial aid eligible."

| | | Credits |
|---|---|---|
| AC 101 | Accounting I | 3 |
| BU 170 | Principles of Marketing | 3 |
| BU 174 | Sales | 3 |
| BU 261 | Advertising | 3 |
| BU 262 | Consumer Behavior | 3 |
| | | **15** |
| *Choose one elective:* | | |
| BU 180 | Principles of Retailing | 3 |
| BU 265 | Marketing Research | 4 |
| IT xxx | Information Technology Elective *(should be career/specialty related*)* | 3-4 |
| | | **3-4** |
| | **TOTAL PROGRAM CREDITS** | **18-19** |

** Approval by Department Head*

## Real Estate

The certificate program in Real Estate offers students the opportunity to acquire course work sufficient to take the broker or salesperson exam in New Hampshire. It also meets the requirements for continuing education to maintain a license in New Hampshire. For more information contact Department Head Martha Hunt at 603-271-8880. This program is "financial aid eligible."

| | | Credits |
|---|---|---|
| RE 101 | Fundamentals of Real Estate | 3 |
| RE 162 | Real Estate Computer Applications | 3 |
| RE 102 | Real Estate Marketing and Advertising | 3 |
| RE 220 | Real Estate Finance | 3 |
| RE 221 | Real Estate Brokerage Management | 3 |
| RE 222 | Real Estate Investment and Taxation | 3 |
| RE 223 | Commercial Real Estate | 3 |
| RE 225 | Property Management | 3 |
| | **TOTAL PROGRAM CREDITS** | **24** |

## Small Business Management

This certificate is designed to give students a foundation for starting their own business. An emphasis is placed on helping students determine if they have the "spirit of risk" to become an entrepreneur. For more information contact Martha Hunt at 603-271-8880. This program is available evenings only. This program is "financial aid eligible."

| | | Credits |
|---|---|---|
| AC 101 | Accounting I | 3 |
| BU 101 | Introduction to Business | 3 |
| BU 170 | Principles of Marketing | 3 |
| BU 225 | Business Law I | 3 |
| BU 240 | Small Business Management | 3 |
| | | **15** |
| *Choose one elective:* | | |
| BU 150 | Supervision | 3 |
| BU 174 | Principles of Sales | 3 |
| BU 262 | Consumer Behavior | 3 |
| | | **3** |
| | **TOTAL PROGRAM CREDITS** | **18** |

## Sports Management

This 6-course certificate program is designed to orient students to the world of sports-related businesses while providing a broad overview regarding possible careers or future studies in sports management. Courses in this program will transfer into the associate degree program at NHTI entitled: *Associate in Science in Business Administration with Concentration in Sports Management.*

For more information contact Michael Moffett at 603-271-7734. This program is available days and evenings. This program is "financial aid eligible."

| | | |
|---|---|---|
| SM 101 | Introduction to Sports Management | 3 |
| SM 170 | Sports Marketing | 3 |
| SM 180 | Public Relations and Advertising for the Sports Industry | 3 |
| SM 210 | Sports Facilities | 3 |
| SM 225 | Sports Law | 3 |
| SM 250 | Sport and Society | 4 |
| | **TOTAL PROGRAM CREDITS** | **19** |

## Travel and Tourism

The Travel and Tourism certificate is a travel counselor/airline agent-focused program. Students will learn all facets of the travel industry from airlines reservation on a "live" airline reservation system (Worldspan) to tours/cruises. Emphasis is placed on destination geography. Students will complete the Airline Reporting Corporation ticketing documents forms used in travel agencies/airlines and will gain knowledge in international travel from documents needed to enter a country to understanding customer relations in a foreign country. For more information contact Maryanne S. Adams at 603-271-6963. This program is available days and evenings. This program is "financial aid eligible."

| | | Credits |
|---|---|---|
| GY 135 | Destination Travel Geography I | 3 |
| GY 137 | Destination Travel Geography II | 3 |
| TR 101 | Introduction to the Hospitality and Tourism Industry | 3 |
| TR 125 | Travel Industry Procedures | 4 |
| TR 225 | Airline Reservation | 3 |
| XX xxx | Travel or Hotel Elective | 3 |
| | **TOTAL PROGRAM CREDITS** | **19** |

# Computers

## Information Technology

The Information Technology certificate program consists of six courses which provide students with programming and systems design skills used in business and industry. Extensive hands-on training is provided, in addition to the basic foundation courses in computer theory and applications. This program is recommended for persons who have achieved a level of expertise in their field or who have completed a college degree program in a speciality area and need computer applications and programming courses to be more effective in using computer productivity tools for managerial decisions. For more information contact Department Head Tom Laurie at 603-271-2369. This program is available days and evenings. This program is "financial aid eligible."

| **Required Courses:** | | | **Credits** |
|---|---|---|---|
| IT | 108 | Personal Computer Hardware and Software | 3 |
| IT | 110 | Programming Fundamentals | 3 |
| IT | 140 | Database Design and Management | 3 |
| | | | **9** |
| **AND one (1) of the following:** | | | |
| IT | 150 | Introduction to Networking | 3 |
| IT | 212 | Visual Basic.NET | 3 |
| IT | 280 | Windows Server Operating Systems | 3 |
| | | | **3** |
| **AND any two of the following:** | | | |
| IT | 150 | Introduction to Networking | 3 |
| IT | 180 | Introduction to Unix Operating Systems | 3 |
| IT | 212 | Visual Basic.NET | 3 |
| IT | 214 | Advanced Visual Basic.NET | 3 |
| IT | 240 | Database Implementation | 3 |
| IT | 250 | Networking Theory I | 3 |
| IT | 252 | Networking Theory II | 3 |
| IT | 270 | Web Design and Development I | 3 |
| IT | 272 | Web Design and Development II | 3 |
| IT | 280 | Windows Server Operating Systems | 3 |
| IT | 290 | Managing Information Systems | 3 |
| | | | **6** |
| **AND one (1)** | | | |
| Other IT or CP course requiring approval of Department Head | | | 3-4 |
| | | | **3-4** |
| | | **TOTAL PROGRAM CREDITS** | **21-22** |

# Education Programs

## Career and Technical Education Alternative Certification

This program is designed to offer students the knowledge and skills required by the New Hampshire Department of Education standards for career and technical educator certification. This program has been constructed according to the competencies required for Ed 610.01 Professional Education and Ed 507.02 Teachers of Career and Technical Education. Ed 610.01 competencies are met through courses ED 104 and ED 105. Ed 507.02 competencies, as proposed, are met through ED 230 Essentials of Career and Technical Curriculum and Instruction.

The program is designed to allow students to use program credits toward an Associate in Arts in Teacher Preparation or Associate degree in a general studies or career and technical program. Students also may use the credits toward a Bachelor's or Master's degree program in Education through Plymouth State University. Articulation with other colleges and programs may be sought.

Students accepted into this program may provide evidence that they may be eligible to receive credit for courses via aggregate educational experience and/or occupational experiences. In such cases students may be eligible to earn credit by examination or transfer credit, according to the policies and procedures of the college.

***Students eligible for this program may be:***

- those with a high school diploma or equivalent and significant work/life experience who would like to earn a credential to teach or a credential to teach and college credits toward Associate or Baccalaureate Degree completion;
- those with some college courses or an Associate Degree and significant work/life experience who would like to earn a credential to teach or a credential to teach and college credits toward Associate or Baccalaureate Degree completion;
- those with a Bachelor's Degree (but no certification) and significant work/life experience who would like to earn a credential to teach or a credential to teach and possible graduate credits toward Master Degree completion.

In all cases, prospective career and technical educators will possess significant life/work experience or academic preparation in a career and technical content area. The Career and Technical Center Directors and School Districts will retain the authority to review the eligibility of all prospective career and technical educators and define any or all of the certificate component courses to be required for credentialing, on an individual basis. These individuals will then be referred to New Hampshire Technical Institute for course registration and completion. For more information contact Department Head Kelly Moore Dunn at 603-271-8881. This program is "financial aid eligible."

| | | | **Credits** |
|---|---|---|---|
| ED | 101 | Introduction to Exceptionalities | 3 |
| ED | 104 | Foundations of Education | 3 |
| ED | 204 | Instructional Technology | 3 |
| ED | 207 | Teaching and Learning Process | 3 |
| ED | 230 | Essentials of Career and Technical Curriculum and Instruction | 3 |
| EN | 101 | English Composition | 4 |
| PY | 209 | Educational Psychology | 3 |
| PY | 220 | Human Growth and Development: The Life Span | 3 |
| | | **TOTAL PROGRAM CREDITS** | **25** |

## Early Childhood Education

The courses in the Certificate in Early Childhood Education are designed to meet the State of New Hampshire minimum requirements for an Early Childhood Assistant Teacher I - an individual who is employed in an early childhood setting and working under the supervision of a qualified teacher. Upon completion of the Early Childhood Education Certificate, the student will have completed 13 credits toward the Associate Degree. For more information contact Gale Hall at 603-271-2305. This program is available days and evenings. This program is ***not*** "financial aid eligible."

| **Fall Semester** | | **Credits** |
|---|---|---|
| EC 125 | Growth and Development of the Young Child | 4 |
| EC 141 | Curriculum and Environments I | 3 |
| | | **7** |
| **Spring Semester** | | |
| EC 102 | Foundations in Early Childhood Education/Child Care | 3 |
| EC 188 | Health, Safety and Nutrition in Early Childhood Education | 3 |
| | | **6** |
| | **TOTAL PROGRAM CREDITS** | **13** |

**NOTE:** *A diploma program option is available for students who have* ***completed the certificate program*** *and wish to attain a credential prior to completing an entire associate degree. Completion of the diploma program will allow students to meet the New Hampshire requirements for Teacher I or Assistant Teacher II in early childhood education. See notations, * and **, on page 27 of this catalog and contact Gale Hall at the number above for further information.* ***The Diploma program is "financial aid eligible."***

## Education

The Certificate in Education offers students the option of taking the core education curriculum, allowing for transfer to the Associate in Science in Education program, or to a baccalaureate program in education. For more information, contact Department Head Kelly Moore Dunn at 603-271-8881. Courses in this program are scheduled in the late afternoon-early evening, beginning at 4:00 pm. This program is "financial aid eligible."

*Certificate program students may take 200 level courses concurrently with 100 level courses with permission from the department head of the Education Program.*

| **Fall Semester** | | **Credits** |
|---|---|---|
| ED 101 | Introduction to Exceptionalities | 3 |
| ED 104 | Foundations of Education | 3 |
| ED 207 | The Teaching-Learning Process | 3 |
| MT 120 | Contemporary College Math ***or*** | |
| MT 123 | Intermediate Algebra | 4 |
| | | **13** |
| **Spring Semester** | | |
| ED 201 | Legal Issues in Education | 3 |
| ED 204 | Instructional Technology | 3 |
| ED 212 | Design of Instruction | 3 |
| PY 209 | Educational Psychology | 3 |
| | | **12** |
| **To Be Arranged** | | |
| ED 220 | Field Experience in Education *(required)* | 3 |
| | | **3** |
| | **TOTAL PROGRAM CREDITS** | **28** |

## Special Education

The Certificate in Special Education is designed for:

a) People interested in exploring careers in special education;
b) Current paraeducators looking to enhance their skills and possibly move toward degrees in regular or special education;
c) Current teachers seeking professional development skills related to working with children with special needs.

Credits earned in the Certificate in Special Education are fully transferable to NHTI's Associate in Science in Education degree. Contact Contact Kelly Moore Dunn at 603-271-8881 for additional information. This program is "financial aid eligible."

*Certificate program students may take 200 level courses concurrently with 100 level courses with permission from the department head of the Education Program.*

| **Fall Semester** | | **Credits** |
|---|---|---|
| ED 101 | Introduction to Exceptionalities | 3 |
| ED 200 | Supporting Students with Challenging Behaviors | 4 |
| ED 203 | Teaching Strategies for Diverse Learners | 3 |
| | | **10** |
| **Spring Semester** | | |
| ED 204 | Instructional Technology | 3 |
| EN 101 | English Composition | 4 |
| | | **7** |
| | **TOTAL PROGRAM CREDITS** | **17** |

# Engineering Technology Programs

## Broadband Networking & Communications Technology

This Certificate Program will provide state-of-the-art capability in broadband communications, offering telecommunications skills and in-depth understanding of broadband technologies dealing with fiber optics, coaxial cable, microwave, antennae and satellite communication systems as well as an in-depth understanding of required performance-monitoring techniques. Credits attained in the Certificate Program are transferable to the Associate Degree program in Broadband Networking & Communications Technology.

In order to provide these advanced courses to a wide audience, participants will only need a beginning background in broadband networking and communications technology, electric circuit theory, basic knowledge of Algebra I and II and fundamental knowledge of utilization of application software for quantitative analysis, system analysis and documentation.

This program is available evenings. For more information contact Sterling Hough at 603-271-7758 or e-mail at shough@nhctc.edu. This program is "financial aid eligible."

| Students should follow the sequence listed below: | | | **Credits** |
|---|---|---|---|
| BN | 102 | RF Signal Analysis | 4 |
| EL | 110 | Electronics I | 4 |
| EL | 210 | Electronics II | 4 |
| BN | 201 | Fiber Optics and Transmission Lines | 4 |
| BN | 206 | Analog and Digital Communication Systems | 4 |
| BN | 240 | Data and Internet Communication | 4 |
| | | **TOTAL PROGRAM CREDITS** | **24** |

## Computer Aided Design

This 21-credit-hour certificate program is designed for students who plan to be CAD operators, modelers and animators in the fields of architecture, civil engineering and design visualization. The completion of required core courses qualifies students to choose one of the three areas of emphasis to earn this certificate. Upon successful conclusion of the CAD certificate program, participants will be able to effectively create 2D, as well as 3D drawings in CAD, and to model and visualize 3D objects for projects presentations. *Course offerings each semester are dependent on instructor availability.* For more information, contact Department Head Liaquat Khan at 603-271-7746. *This program is available evenings only. This program is "financial aid eligible."*

| **REQUIRED CORE COURSES:** | | | **Credits** |
|---|---|---|---|
| AR | 101 | AutoCAD 2D | 3 |
| AR | 102 | AutoCAD 3D | 3 |
| AR | 103 | Architectural Graphics and Sketching | 3 |
| IT | 102 | PC Applications | 3 |
| | | | **12** |

**SELECT ONE OF THE THREE AREAS OF EMPHASIS:**

**Architectural Design***

| | | | |
|---|---|---|---|
| AR | 191 | Architectural Desktop | 3 |
| AR | 192 | Revit ***or*** | |
| AR | 194 | Microstation | 3 |
| AR | 193 | 3D Studio Viz | 3 |
| | | | **9** |

**Civil CAD - Land Development***

| | | | |
|---|---|---|---|
| CV | 191 | Land Desktop | 3 |
| CV | 192 | Civil Design | 3 |
| CV | 193 | Survey CAD | 3 |
| | | | **9** |

**Design Visualization***

| | | | |
|---|---|---|---|
| DV | 191 | 3D Studio Max 1 (Modeling & Visualization) | 3 |
| DV | 192 | 3D Studio max 2 (Advanced Modeling, Visualization & Animation) | 3 |
| DV | 193 | Introduction to Photoshop | 3 |
| | | | **9** |
| | | **TOTAL PROGRAM CREDITS** | **21** |

*** Short CAD Certificates**

These 9 credit-hour short CAD certificate programs are designed for practicing professionals who desire to enhance their skills by learning to use CAD. The main focus of these certificates is to offer students in-depth, hands-on experience into the software and the relationship between the design, engineering and CAD. Upon successful conclusion of one of these CAD certificate programs, participants will be able to effectively create CAD drawings and to model and visualize projects for presentations. *Students must have a working knowledge of AutoDesk, AutoCad and Microsoft Windows.* For additional information, contact Department Head Liaquat Khan at 603-271-7746. *These programs are available evenings only.* The short CAD certificates are ***not*** "financial aid eligible."

## Computer Technology Programming (Advanced)

This Certificate Program will provide state-of-the-art capability in using computers, offering marketable programming skills and in-depth understanding and manipulation of hardware. Credits attained in the Certificate Program are transferable to the Computer Engineering Technology Associate Degree.

In order to provide these advanced courses to a wide audience, participants will only need a beginning background in C++ programming and fundamental use of the Microsoft Windows operating system. This can be accomplished by taking *IT 108 Personal Computer Hardware and Software* and *CP 107 Introduction to Programming with C++* at NHTI. As a Corequisite, the ability to understand and use algebraic equations is key to the success of programming. *MT 133 Elementary Functions* is recommended for this purpose. For more information, contact Sterling Hough at 603-271-7758 or e-mail at shough@nhctc.edu. This program is available days and evenings. This program is "financial aid eligible."

| **Required initial course:** | | **Credits** |
|---|---|---|
| CP 235 | Algorithms With Object Oriented Programming | 4 |
| | | **4** |

**AND any three of the following**
*(check prerequisites in course descriptions)*:

| | | |
|---|---|---|
| CP 240 | Programming for Windows Operating Systems | 4 |
| CP 222 | Data Communications & Internetworking | 4 |
| CP 252 | Networking and Internet Technologies | 4 |
| CP 260 | Computer Real Time Interfacing | 4 |
| | | **12** |
| | **TOTAL PROGRAM CREDITS** | **16** |

## Electronic Technology

This Certificate Program is designed to accommodate people with technical backgrounds who are interested in learning electronics, e.g., those with liberal arts-based computer science degrees working in areas of software where basic electronics knowledge is needed. The credits attained in the Certificate in Electronic Technology are applicable to the Electronic Engineering Technology Associate Degree.

In order to provide these advanced courses to a wide audience, participants will only need a basic background of Elementary Functions (MT 133), basic knowledge of digital electronics (EL 115) and demonstrate computer literacy (IT 102 or IT 108) which will be offered on a regular basis at NHTI. For more information contact Sterling Hough at 603-271-7758 or e-mail at shough@nhctc.edu. This program is "financial aid eligible."

| | | **Credits** |
|---|---|---|
| EL 101 | Electric Circuits | 4 |
| EL 102 | Circuit Analysis | 4 |
| EL 110 | Electronics I | 4 |
| EL 210 | Electronics II | 4 |
| EL 215 | Advanced Digital Electronics | 4 |
| | **TOTAL PROGRAM CREDITS** | **20** |

*Prerequisites:*

| | | |
|---|---|---|
| MT 133 | Elementary Functions *(or equivalent background)* | 5 |

Demonstrated computer literacy

## Landscape Design

The Landscape Design Certificate program provides entry-level skills for those entering the landscaping field or continuing education for landscapers, florists/nursery growers, architects, and anyone interested in a broader range of knowledge in this area. For more information contact Continuing Education at 603-271-7122. This program is available evenings only. This program is "financial aid eligible."

**FIRST YEAR**

| **Fall Semester** | | **Credits** |
|---|---|---|
| LD 101 | Plant Materials I | 3 |
| LD 115 | Landscape Architecture Design Theory | 3 |
| | | **6** |

| **Spring Semester** | | |
|---|---|---|
| LD 102 | Plant Materials II | 3 |
| LD 112 | Landscape Architectural Drafting and Sketching | 3 |
| | | **6** |

**SECOND YEAR**

| **Fall Semester** | | |
|---|---|---|
| LD 109 | Landscape Surveying | 3 |
| LD 120 | Planting Design | 3 |
| | | **6** |

| **Spring Semester** | | |
|---|---|---|
| LD 117 | Small Scale Design Project | 3 |
| LD 125 | Landscape Construction Details and Methods | 3 |
| | | **6** |
| | **TOTAL PROGRAM CREDITS** | **24** |

*Prerequisites:* Submit copy of High School diploma or the equivalent and proof of completion of two years of high school math (Algebra I and Algebra II ***or*** NHTI's MT 108 and MT 109) with final grades of "C" or higher

# Health Programs

## Medical Coding

Health Information Management is a dynamic field and a growing profession. Coding professionals are trained specialists in classifying medical data and transforming diagnoses, conditions, diagnostic and therapeutic procedures into coded data that serve as the basis for local, regional, statewide, national and world-wide comparison. Payment for medical care is contingent on the coded data provided by medical coding specialists. Employment opportunities include positions in hospitals, clinics, physician offices, nursing homes, insurance companies, and mental health facilities. Coding specialists work with ICD-9, CPT Codes and medical information and reimbursement systems. These codes change on a yearly basis and ongoing training is required. For further information contact Winnona Vachon, RHIA, CCS, CCS-P at 603-271-7122. This program is available evenings only. This program is "financial aid eligible."

**FIRST YEAR**

| **Fall Semester** | | | **Credits** |
|---|---|---|---|
| HS | 101 | Medical Terminology | 3 |
| BI | 120 | Human Biology | 4 |
| | | | **7** |

| **Spring Semester** | | | |
|---|---|---|---|
| BI | 122 | Basic Pathophysiology | 3 |
| HS | 104 | Health Care Data Content and Delivery Systems | 3 |
| | | | **6** |

| **Summer Semester** | | | |
|---|---|---|---|
| IT | 102 | PC Applications | 3 |
| | | | **3** |

**SECOND YEAR**

| **Fall Semester*** | | | |
|---|---|---|---|
| HS | 112 | Basic ICD-9-CM (lab) | 2 |
| HS | 113 | Intermediate ICD-9-CM | 4 |
| | | | **6** |

| **Spring Semester**** | | | |
|---|---|---|---|
| HS | 114 | Basic Ambulatory Coding | 2 |
| HS | 115 | Intermediate Ambulatory Care | 4 |
| | | | **6** |

**TOTAL PROGRAM CREDITS 28**

* *HS 112 will meet twice a week for five weeks, followed by HS 113 for ten weeks.*

** *HS 114 will meet twice a week for five weeks, followed by HS 115 for ten weeks.*

*Prerequisites:* Submit proof of high school graduation or the equivalent; keyboarding skills helpful.

## Medical Transcription

A certificate in Medical Transcription prepares students for entry level positions in one of the fastest growing occupations. Medical transcriptionists work in hospitals, clinics, private practices, insurance companies and transcription services. As a medical language specialist you will be transcribing dictation by health care professionals on patient assessment, diagnosis, prognosis and therapeutic procedures. For information contact Janet Hanes, CMT, Program Coordinator, Continuing Education at 603-271-7122. This program is available evenings only. This program is "financial aid eligible."

**FIRST YEAR**

| **Fall Semester** | | | **Credits** |
|---|---|---|---|
| HS | 101 | Medical Terminology | 3 |
| IT | 102 | PC Applications | 3 |
| | | | **6** |

| **Spring Semester** | | | |
|---|---|---|---|
| BI | 120 | Human Biology | 4 |
| HS | 104 | Health Care Data Content & Delivery System | 3 |
| | | | **7** |

**SECOND YEAR**

| **Fall Semester** | | | |
|---|---|---|---|
| EN | 101 | English Composition | 4 |
| MN | 101 | Medical Transcription with Lab* | 3 |
| | | | **7** |

| **Spring Semester** | | | |
|---|---|---|---|
| BI | 122 | Basic Pathophysiology | 3 |
| MN | 202 | Advanced Medical Transcription | 3 |
| | | | **6** |

**TOTAL PROGRAM CREDITS 26**

* *Specific information about equipment needed for MN 101 will be given the first night of class.*

*Prerequisites:* Submit proof of High School graduation or the equivalent; minimum Keyboard Skills of 45 corrected words per minute; competency in English usage, spelling, listening, and comprehension skills.

## Radiation Therapy

The Certificate Program in Radiation Therapy is an advanced placement option for students with prior degrees in the Radiological Sciences. For more information contact program coordinator Amy VonKadich at 603-271-0700. This program is "financial aid eligible."

An Associate Degree option is available for students do not have a degree in Radiological Sciences. *See pages 39 and 40.*

**FIRST YEAR**

| **Fall Semester** | | **CL** | **LAB** | **CR** |
|---|---|---|---|---|
| RTH 101 | Introduction to Radiation Therapy | 3 | 0 | 3 |
| RTH 110 | Principles and Practice of Radiation Therapy I | 3 | 2 | 4 |
| RTH 200 | Radiation Protection and Biology | 3 | 0 | 3 |
| RTH 220 | Radiation Therapy Physics | 3 | 0 | 3 |
| RTH 290 | Clinical Practice III | 0 | 24 | 4 |
| | | | | **17** |
| **Spring Semester** | | | | |
| RTH 205 | Treatment Planning | 3 | 0 | 3 |
| RTH 210 | Principles and Practice of Radiation Therapy II | 3 | 2 | 4 |
| RTH 215 | Sectional Anatomy and Pathology | 3 | 0 | 3 |
| RTH 293 | Clinical Practice IV | 0 | 24 | 4 |
| | | | | **14** |
| **Summer Semester** | | | | |
| RTH 295 | Clinical Practice V | 0 | 32 | 6 |
| | | | | **6** |

**SECOND YEAR**

| **Fall Semester** | | **CL** | **LAB** | **CR** |
|---|---|---|---|---|
| RTH 296 | Clinical Practice VI | 0 | 32 | 6 |
| RTH 280 | Registry Review | 1 | 0 | 1 |
| | | | | **7** |
| | **TOTAL PROGRAM CREDITS** | | | **44** |

**Specific Admission Requirements for Radiation Therapy Certificate Program:**

*Preference will be given to applicants whose applications are complete and received by the NHTI Admissions Office no later than February 17, 2006 (with the exception of the interview) for Fall 2006 admission.*

1. High school or college biology with lab AND chemistry with lab, both with grades of "C" or higher;
2. College preparatory algebra I with a grade of "C" or higher or NHTI's MT 103 and MT 104 both with grades of "C" or higher;
3. High school level physics is recommended;
4. Clinical observation period in a Radiation Oncology Center; criteria established by and available from program faculty; call 603-271-7159 for information;
5. Completion of Cardiopulmonary Resuscitation and Airway Obstruction Management for one and two person adult, infant and child before program registration;
6. A personal interview with the applicant will be arranged by the Admissions Office once the admission file is complete.
7. Completion of a Radiological Sciences program.

# Human Service Programs

## Addiction Counseling/Criminal Justice

This certificate, provided as a joint effort between the Human Service and Criminal Justice departments, approaches treatment of addicted offenders by providing the participant with increased knowledge and understanding of the delivery of successful addiction treatment within today's criminal justice system. A recent trend toward the combining of sanctions and treatment for addictions has effectively changed the knowledge base necessary to provide these services. Understanding the correlation between drug addiction and crime is now required knowledge for addiction counselors, law enforcement and corrections personnel, as new program designs require proficiency in the delivery of treatment services that address both the offense and the addiction. The certificate program cross-trains criminal justice and addiction staff, and includes an Internship experience allowing the student to receive hands-on, supervised instruction in a setting providing this combination of services. The Certificate Program may be taken in the day format below or over two years in a day/evening format. For more information contact Lindsay Freese at 603-271-6951. This program is "financial aid eligible."

| **Fall Semester** | | **Credits** |
|---|---|---|
| CJ 101 | Introduction to Criminal Justice | 3 |
| AD 120 | Survey of Addictive Behaviors and Treatment | 3 |
| MH 187 | The Helping Relationship: Communication Skills for Today's Professional | 4 |
| | | **10** |
| **Spring Semester** | | |
| CJ 150 | Criminology | 3 |
| CJ 215 | Correction Operations | 3 |
| AD 115 | Fundamentals of Criminal Justice-Oriented Addiction Treatment | 3 |
| | | **9** |
| **Summer Semester** | | |
| AD 215 | Internship: Orientation to Addictive Behaviors Counseling with Criminal Justice Clients | 6 |
| | | **6** |
| | **TOTAL PROGRAM CREDITS** | **25** |

## Community Social Service

The Certificate program in Community Social Service is an eight-course, 24-credit program offered through the Division of Continuing and Corporate Education at New Hampshire Technical Institute in conjunction with the State of New Hampshire Division of Mental Health and Developmental Services.

This program focuses on the core values, knowledge and skills needed to be effective in the provision of community-based support. Students will develop skills and competencies in interviewing, counseling, and case management and will be able to link clients with needed community resources and services.

For further information on the Community Social Service certificate, intern site placement, and scholarship eligibility, please contact Mark Jewell, N.D., Ph.D. at 603-496-7198. This program is available evenings only. This program is "financial aid eligible."

| | | Credits |
|---|---|---|
| CS 111 | Introduction to Community Social Services | 3 |
| CS 112 | Supportive Communication Skills | 3 |
| CS 115 | Learning and Behavior | 3 |
| CS 116 | Assessment & Individual Planning | 3 |
| CS 117 | Fieldwork I | 3 |
| PY 105 | Introduction to Psychology | 3 |
| PY 220 | Human Growth and Development: The Life Span | 3 |
| | | **21** |
| *Choose one elective:* | | |
| AD 120 | Survey of Addictive Behaviors and Treatment | 3 |
| PY 210 | Abnormal Psychology | 3 |
| PY 280 | Individual Counseling: Theory and Practice | 3 |
| PY 283 | Group Counseling | 3 |
| | | **3** |
| | **TOTAL PROGRAM CREDITS** | **24** |

## Gerontology

This program is designed to increase the knowledge and skills of the individual who may already be working with the elderly but has no formal gerontology training. This program will assist the student in upgrading competencies and improving knowledge in this area, while working within the context of their present employment site. For more information contact Kathleen Curran at 603-271-2475. This program is available evenings only. This program is "financial aid eligible."

| | | Credits |
|---|---|---|
| GE 101 | Dimensions of Aging | 4 |
| GE 120 | Elderly and the Community | 3 |
| GE 130 | Public Policy and Aging | 3 |
| GE 140 | Biological Aspects of Aging | 3 |
| GE 150 | Gerontology: Current Topics | 3 |
| | **TOTAL PROGRAM CREDITS** | **16** |

# Justice/Legal Studies

## Paralegal Studies

This certificate program is approved by the American Bar Association and is designed to prepare students to perform effectively in today's legal and business communities. The program trains men and women for professional status as lawyer's assistants in corporations, banks, insurance companies, government agencies and law firms. The program provides students with a broad-based academic curriculum which emphasizes the skills, substantive knowledge and ethics a paralegal needs to assist lawyers effectively.

The work of the paralegal requires discretion and independent judgement. It is essential that a paralegal have strong writing ability, an analytical approach to organizing and reviewing material, and a foundation in computers and word processing. Although a paralegal always works under the supervision and direction of an attorney, it is important that he/or she be well-motivated and self-starting. While a paralegal can perform many of the tasks which have otherwise been performed by attorneys, a paralegal may not give legal advice, represent a client in court, or otherwise engage in the practice of law. For more information contact Stacey Peters at 603-271-7104. This program is available evenings only. This program is "financial aid eligible."

| | | Credits |
|---|---|---|
| PL 101 | Foundations of Paralegal Studies | 2 |
| PL 103 | Causes of Action in Contract and Tort | 1 |
| PL 104 | Legal Research | 4 |
| PL 110 | Litigation and Trial Preparation | 3 |
| PL 221 | Real Estate | 3 |
| PL 231 | Business Organizations and Bankruptcy | 3 |
| PL 241 | Family Law | 1 |
| PL 251 | Probate Estates and Trusts | 3 |
| PL 261 | Criminal Process | 1 |
| PL 270 | Internship (Optional) | 3 |
| PL 271 | Legal Writing | 1 |
| | **TOTAL PROGRAM CREDITS** | **22-25** |

*Prerequisites:*

1. 45 college credits in general education courses from an accredited institution (consistent with the requirements of the American Bar Association, which approves this Certificate)
   - 18 of these credits must meet distribution and content requirements designated by the ABA, in at least three (3) different disciplines such as English, foreign languages, humanities, mathematics and natural science
2. two confidential letters of reference
3. writing sample
4. submit official high school and college transcripts

**Internship Considerations**

The college must ensure that individuals (customers, employees, etc.) at internship and service learning sites are not adversely affected by students during learning experiences. Therefore, students participating in internship and field experiences must demonstrate the emotional stability required to exercise sound judgment, accept direction and guidance from a supervisor or faculty member and establish rapport and maintain sensitive interpersonal relationships with employees, customers and clients.

**Character Expectations**

Applicants should be aware that background checks are completed by potential employers prior to obtaining any position with arrest or detention powers, and typically, even before being accepted for an internship. Applicants who have been in difficulty with the law may not be employable, or even eligible for an internship. Because future goals may be compromised, applicants are advised to discuss any concerns with the Department Head.

# DIVISION OF CONTINUING & CORPORATE EDUCATION

## Continuing Education

Through the Division of Continuing Education, NHTI offers credit and noncredit courses plus Certificate and Associate Degree programs, both days and evenings, on and off campus. Hundreds of NHTI graduates have received degrees by taking courses on a part time basis, evenings, weekends, Summer Term, on-line — whenever the courses may fit into an individual's busy schedule.

The Division currently enrolls several thousand students annually. Members of NHTI's full-time day faculty regularly teach Continuing Education courses, ensuring consistently high quality education.

## Business Programs

Accounting**
Business Administration
Hotel Administration**
Human Resource Management*
Management*
Marketing**
Marketing/Sales*
Real Estate**
Small Business Management*
Sports Management**
Travel and Tourism**

## Engineering Technology

Architectural Design*
Architectural Engineering Technology
Broadband Networking & Communications Technology**
Civil CAD-Land Development*
Computer-Aided Design*
Computer Engineering Technology
Computer Technology Programming (Advanced)*
Design Visualization*
Electronic Engineering Technology
Electronic Technology*
Manufacturing Engineering Technology
Mechanical Engineering Technology

## Education, Health and Human Service

Addiction Counseling**
Community Social Service*
Early Childhood Education**
Education**
Gerontology*
Human Service
Medical Coding*
Medical Transcripton*
Special Education*

## Information Technology**

## Justice/Legal Studies

Criminal Justice❖
Paralegal Studies**

## Additional Programs

Associate in Arts - Transfer Program
Associate in Science in General Studies
Landscape Design*

* notes programs that are available as certificates only
** both certificate and associate degree programs available
❖ Courses are also offered in distance learning and on-line formats.

***For more information call:***

**Continuing Education at (603) 271-7122.**

## Center for Training & Business Development

***Mission Statement***

*"We provide our customers with high quality education and training programs, and access to information, technology and resources that enhance their ability to compete and to succeed in a dynamic economy."*

*The Center for Training & Business Development* serves New Hampshire's workforce as a training resource for business, industry, healthcare, government and education. Through a variety of workshops and courses, professionals are able to update their technical skills, network with others in their respective fields, gain continuing education units for professional development, and participate in learning activities that promote lifelong learning.

*The Center for Training & Business Development* partners with professional organizations to broker continued professional development to members. A variety of training activities are held on the campus of NHTI in Concord; however, on-site customized training is available to fit the client's needs.

**For more information and to receive the latest schedule, please contact:**

**The Center for Training & Business Development**

**31 College Drive**
**Concord, NH 03301**
**603-271-6663/fax: 603-271-6667**

**Visit our web site at *www.nhti.edu/ctbd/***

# LIBRARY

## Library
### (Learning Resources Center)

The NHTI Library has emphatically entered the 21st century! We moved into a new 26,000 sq. ft. building in April 2001 – with the first clock tower on the campus. Located on the quad, it is the learning and information hub of the college campus. The Library was designed to meet the research and study needs of our community. Quiet study areas, comfortable computer labs, natural lighting, soft seating and numerous data ports located throughout the building help make the Library *the place* to meet and study on campus. A large steel sculpture of *Feathers* by Danbury artist Joseph DeRobertis is installed in the clock tower. It was placed there through the Percent for the Arts Program of the NH State Council on the Arts.

Acknowledging the paradigm shift in library and information science, this facility is a true information commons, respecting the services and collections of the traditional library while embracing the technological advances made possible by the computer and the world-wide-web. Many of our services may be found online at our homepage, *http://www.nhti.edu/library/*. The central file is the online union catalogue of materials in all the libraries of the NH Community Technical College System. Choose *Concord* to isolate NHTI materials.

Library resources are available to the general public as well as the campus. The library owns, among other things, books, periodicals, CD-ROMs, maps, microforms, video and audio recordings and photographs. And then there is the limitless access to resources of the Internet; some are free, some require a password to access. The Library's comprehensive services include cooperation with many other academic, public and special library networks, including the statewide system of the New Hampshire State Library (ask for Interlibrary Loan for this service). The Library is the designated home library for both the New Hampshire Autism Society and the New Hampshire Chapter of the American Institute of Architects. The Library houses a special collection of CAD-CAM documents (unique in the State) useful to the engineering technologies. The college archives contain records of NHTI history.

The Library also encompasses Media Services, which assists students, faculty and staff in electronic, computer, video and audio-visual presentations. Media Services includes new space designated to be an electronic distance learning conference room. This space has live video links to other colleges and external meeting sites for the exchange of educational materials, courses and video conferencing.

Many frequently asked questions about the Library, including services, collections, hours of operation, etc., can be answered by accessing our homepage. You may also contact us by telephone at 603-271-7186.

Library Hours:

| | | | |
|---|---|---|---|
| Sunday | 12:00 Noon | – | 9:30 p.m. |
| Monday-Thursday | 7:30 a.m. | – | 9:30 p.m. |
| Friday | 7:30 a.m. | – | 4:30 p.m. |
| Saturday | 9:00 a.m. | – | 3:00 p.m. |

Summer hours are somewhat shorter. Please call ahead or check our homepage. Extended hours are generally available during final exam periods.

# LEARNING CENTER

## Mission Statement

**The Learning Center at NHTI supports academic success by promoting independent, self-directed learning in a positive environment.**

Visit the Learning Center, located in the library, and explore the free resources and services available to students: Academic Advising & Study Skills, Assessment Testing, Career Exploration, Computer Learning Lab, Disabilities Services, Math Lab, Tutoring, and Writing Center.

## Academic Advising & Study Skills

Advisors work with students who wish to identify their learning preferences, strengths, and areas needing improvement in order to achieve educational success. Students may request assistance in academic strategies such as managing time, organizing course materials, taking lecture notes, learning from textbooks, and performing well on tests and exams.

## Assessment Testing

All students who enroll in programs at NHTI, whether they plan to take courses full-time or part-time, are required to complete assessment testing prior to registering for classes. Non-matriculated students who have been away from school for several years or are unsure of their skills are also encouraged to take assessment tests.

Students are assessed in the areas of writing, reading comprehension, math, and study strategies. Test scores are used to help students identify their academic strengths and challenges, and to assist students and their advisors in course selection.

## Career Exploration

Students interested in career planning and job search techniques can use Choices Career Exploration software to assist in determining career choices based on their interests, aptitudes, and work values. Choices software helps students research careers in interest areas, search for four-year schools into which they can transfer, and look for jobs on the Internet. A career resource library and guidelines for writing job search letters and resumes are also available.

## Computer Learning Lab

Students have various types of software available to assist them in their coursework, including computer-assisted software to refresh skills in math, the sciences and all areas of reading and writing, and improve typing. Through computer tutorials and practice exercises, students learn at their own pace while receiving immediate feedback. Students find these programs helpful in preparing for classes, reinforcing lessons, and brushing up on academic skills. Many of the programs are also available via the Web from students' homes.

The lab has Microsoft Office XP (Word for word processing, Excel for spreadsheets, and PowerPoint presentation software) and Internet access for students to use in completing assignments such as PC Application labs. During weekday and early evening hours, lab monitors are available to assist students in the use of all software. Workshops on these topics are also offered at various times during the year.

## Disabilities Services

NHTI is in compliance with Section 504 of the 1973 Rehabilitation Act and the Americans with Disabilities Act of 1990 (ADA). Students with disabilities are not discriminated against in terms of program admission and/or opportunities for academic success. Information regarding students' disabilities is kept confidential according to law. Students who wish to receive academic accommodations must provide documentation of the disability, which may include recommendations for accommodations, to the Coordinator of Disabilities Services. Reasonable accommodations for students with disabilities are based upon documentation and individual needs, with reference to course objectives and the health, character and technical standards of specific programs of study. Software that magnifies text, reads text displayed on the screen, and writes text dictated by students is available for students with disabilities. Students with disabilities who choose not to disclose a disability are not eligible for Disabilities Services.

## Math Lab

Math instructors and professional tutors are available on a drop-in basis during weekday and early evening hours. Math tutors help students decipher and learn from math texts, improve math study skills, decode mathematical symbols, hone problem solving skills, understand how to use formulas, create and interpret tables and graphs, use scientific calculators and graphing programs, and prepare for math quizzes and tests. Chemistry, Physics, and Accounting tutors are available during selected day and evening hours.

## Tutoring

Tutoring programs at NHTI include open tutorials, group study sessions, and peer tutoring. Group learning and peer support are effective ways to increase learning and student confidence. During tutoring sessions, students benefit from instructional review, asking questions, learning at their own pace, and receiving immediate feedback.

## Writing Center

English instructors and writing tutors are available during weekday and early evening hours to help students with planning, revising, and editing writing assignments for all subjects, including lab reports, narratives, essays and research papers.

For current offerings, call the Learning Center at (603) 271-7725.
Check our web page at ***www.nhti.edu***.

# CROSS-CULTURAL/ESL EDUCATION

Cross-Cultural Education, through the Divisions of Continuing Education and Academic Affairs, initiates, develops, and coordinates programs and services to meet the growing needs for educational diversity on campus and in the community. The Office of Cross-Cultural/ESL Education is located in Sweeney Hall, Room 301 and offers multifunctional services to students with multicultural backgrounds.

## ESL for Academic Success

NHTI offers credit courses that are tailored to meet ESL students' specific needs. Through the institutional assessment test students will be guided to take either a full academic load of just ESL courses or one or two ESL courses along with courses in their desired academic program.

## ESL for Specific Purposes

These non-credit sessions are designed according to specific needs. Examples of courses currently offered include *Advanced Intensive ESL Session* for graduate students and *Learning English in the Cultural Context* for learners with limited English proficiency, and *Job Related ESL Training Session* that can be offered on site.

### NHTI Faculty Profile

**Kunyu Bu-Zielinski, Ph.D.**
*Director, Cross-Cultural Education*

Undergraduate: Shanghai Teachers' University, China;
M.Ed., University of Minnesota;
Ph.D., University of Minnesota

*"Today we don't have to leave our community to come into contact with people from other cultural backgrounds. I am encouraged that there is increasing interest in having NHTI develop educational diversity. We want to prepare our students to respond to new challenges in this global era as well as to help people in the community with professional development in a variety of areas, including business, health care, counseling, education, travel and more."*

## ESL Tutoring Services

Through Academic Affairs, ESL tutoring services provide students free assistance with academic work including help in writing English compositions, research papers, preparing oral presentations, understanding take-home exams, and completing other types of projects. Individualized tutoring sessions are designed to aid students in improving their reading comprehension, vocabulary, writing, pronunciation, and conversational skills. Quiet testing rooms, extended testing time, and other appropriate testing accommodations are also available to ESL students.

## Advising and Counseling for ESL/ International/Multicultural Students

Counselors coordinate related divisions, departments and services to provide support such as academic planning, class scheduling, cultural adjustment and immigration-related information and assistance.

## Cross-Cultural Resources and Training

Staff members regularly develop new academic courses for students and resources to facilitate curriculum development. They also provide custom-designed seminars and workshops for professional development through the Center for Training & Business Development.

## International Exchanges/Study Abroad Projects

In an effort to broaden cross-cultural opportunities at NHTI, staff members also create international exchanges and study abroad projects available to both students and faculty. The Division of Continuing Education is currently offering a 3-credit course, *"Let China Be Your Classroom"* (SO 298), a two-week program held on the campus of Tongji University in Shanghai, China.

# CAMPUS LIFE

New Hampshire Technical Institute advocates for the uniqueness and worth of each individual student. Programs and services have been created to promote student development by encouraging such concepts as positive and realistic self appraisal; intellectual development; appropriate personal and occupational choices; clarification of values; physical fitness; the ability to relate meaningfully with others; the capacity to engage in a personally satisfying and effective style of living; the capacity to appreciate cultural and aesthetic differences; and the capacity to work independently and interdependently. The staff of the Student Affairs Department is dedicated to providing an environment which supports students in meeting both their academic and personal goals. The following campus life programs and services have been designed to meet these needs.

## Bookstore

The campus bookstore is located in the Library. All books and supplies needed by students are available in the bookstore as well as clothing, glassware, gift items, and health and beauty aids. Also available at the bookstore are cards, candy, reference books, including a wide range of nursing reference books, study guides, and backpacks.

Checks, MasterCard, Visa, and Discover cards are all accepted at the bookstore. Checks should be made payable to NHTI Bookstore. Home address and phone number must appear on all checks. A valid school ID or valid driver's license is required for all purchases made by check.

Information about Bookstore policies and textbook purchasing procedures is available on the NHTI website at *www.nhti.edu*.

## Campus Safety

The Campus Safety Department operates 24 hours a day, 7 days a week and offers a wide variety of services to NHTI students, such as a walking escort service, unlocking/jumpstarting motor vehicles, parking permits, lost and found, investigations, issuing lockers, event coverage, response to complaints and emergencies.

NHTI Campus Safety encourages the reporting of potential or actual criminal activity and other emergencies, by either calling the emergency line at (603) 224-3287 or using one of the Code Blue call boxes on campus.

The Code Blue units dial Campus Safety directly and are there for your assistance. To use a Code Blue unit, push the red button and it will automatically dial for you. A Campus Safety officer will answer. Tell the officer how they can assist you. An officer will respond to your location.

### Campus Crime Statistics

In accordance with the Campus Security Crime Act, NHTI provides information relating to crime statistics and security measures to prospective students and employees. The crime rate is calculated by dividing the student population by the number of incident reports. Statistics are available from the Director of Campus Safety, the Vice President of Student Affairs or from NHTI's web site at *www.nhti.edu*.

### Motor Vehicle Parking and Traffic Regulations

Motor vehicles driven by NHTI students, faculty, and staff are required to have NHTI parking permits. The permits are free of charge and are issued by the Campus Safety Department.

All parking lots on campus are on a first come, first served basis. The only exceptions are areas marked "Reserved" or "Handicapped." Any vehicle parked in these areas will be ticketed or booted at the owner's expense.

## Career Counseling and Placement

The Career Counseling and Placement Office provides career and occupational exploration and individual career counseling. Students and alumni can use *Choices CT*, a career exploration and planning software program and *Alex*, a database of job opportunities. A "Job Market" binder of current full-time and part-time job listings is also available. Many employers who hire NHTI graduates list new positions in the Job Market binder. Students who secure part-time positions in their major field of study or have practicum or internship experiences while attending NHTI increase their chances of securing employment after graduation.

Assistance with job placement and college transfer is also available. Students continuing to higher levels of education comprise about 50 percent of the graduating class.

While graduates of NHTI are prepared to enter a national labor market, approximately 95 percent of those working full-time take jobs in New Hampshire with 84 percent working in jobs directly related to their program of study. Through the concerted efforts of the faculty and staff, placement services continue to be very effective. Assistance with resume writing and job search techniques is an ongoing service through the Career Counseling and Placement Office.

It is recommended that students become acquainted with these services during their first semester. The Career Counseling and Placement Office is located in the Student Center.

## Community Service

New Hampshire Technical Institute is dedicated to a mission of community service that serves to develop, coordinate, and promote literacy, community service and service learning opportunities for the college community with community partnerships and agencies. NHTI is a participating member of Campus Compact for New Hampshire. Campus Compact is a consortium of higher education institutions in New Hampshire whose purpose is to advance the integration of service learning, civic responsibility, and meaningful community collaboration throughout institutions of higher education.

NHTI is the recipient of the first Volunteer NH! Champion Award for Higher Education for outstanding contributions to volunteerism and community service. The college also received the Campus Compact National Center for Community Colleges 2000 Service-Learning Collaboration Award for the category of Collaboration with Social Agencies.

NHTI offers community service opportunities for students, faculty and staff with the Concord Boys and Girls Club, including the Heights and Hopkinton units, the Concord City Prosecutor's Office, the Merrimack County Attorney's Office, Campus Compact for New Hampshire, the Christa McAuliffe Planetarium, United Way of Merrimack County, NHTI Student Affairs Office, NHTI Library, the Penacook Community Center, the Merrimack County Visitation Center, NHTI Child and Family Development Center, and Parents Anonymous. Partnerships have recently been formed between the college and Concord Hospital, the Friendly Kitchen, Concord Housing Authority, the Concord Substance Abuse Coalition, the Renaissance Project located in Allenstown and Pembroke, and the McKenna House.

Students who are eligible for Federal Work Study can earn income and gain meaningful experience to enhance their educational opportunities while enrolled at NHTI. During the 2003-2004 academic year, more than 35 students receiving Federal Work Study performed over 2,200 hours of service. Following the development of the Alternative Spring Break Club in 2000, over 70 students have traveled to either the Roosevelt Warm Springs Institute for Rehabilitation in Georgia, or Green Mountain College in Poultney, Vermont.

## Counseling Services

NHTI's Counseling and Placement Department philosophy is to teach students how to identify and successfully achieve their educational, career, and life goals, and to enhance the student's learning environment throughout the institution. Our primary goal is the teaching of strategies whereby students can gain insight, solve problems, make decisions, change behavior, resolve conflict, and accept responsibility. The counselors work with individuals, in small groups, and in the classroom setting. Referrals can be made to local mental health professionals. Counseling services on campus are available at no cost for students while classes are in session.

## Food Service

NHTI's food service provides meals and snacks at two campus locations. The Little Hall Cafeteria is open seven days a week during the academic year (except holidays and vacations) serving three meals a day Monday through Friday and two meals a day on Saturday and Sunday. Resident Hall students have a variety of meal and flex cash plans to choose from and use the cafeteria as their primary dining location. The Sweeney Hall snack bar provides light meals, snacks and beverages, and is open daily. Dining Services also offers meal and flex cash plan options to commuting students, faculty and staff that can be used at both dining locations.

## Health Services

The Health Services office is located on the first floor of the Student Center. Office hours are Monday-Friday, 8:00 am to 4:30 p.m. Summer hours are 8:00 am to 4:00 p.m. Monday - Friday. Our health care staff includes a nurse, a nurse practitioner and an off-site physician, having access to a broad range of specialists and emergency services in the local area. Students are encouraged to schedule an appointment. Walk-ins will be seen as soon as possible. Routine physicals, gynecological exams, immunizations and lab tests are available for a minimal fee, which may be paid by cash, check or applied to the students tuition bill. Prescriptions and referral services are the financial responsibility of the student. Some over-the-counter medications are provided free of charge from the office.

NHTI offers a group rate from an independent insurance company for accident and sickness insurance. Information may be obtained through the Health Services Office. Insurance is required for all allied health students and sport participants.

Allied health students and students planning to participate in sports must be medically cleared through the Health Services Office prior to participation in clinical practicums or sport activity.

The Health Services office is also a resource center where students can learn behaviors to help ensure wellness for their lifetime. Educational workshops and seminars are presented on various health topics pertinent to all students. For more information, contact the Health Services Office at 603-271-7153.

## Intercollegiate Athletics

NHTI's primary emphasis is to provide high quality education, but the College also recognizes that many students/athletes desire to experience the challenges of intercollegiate athletic competition. To that end, NHTI has developed a challenging program that offers the intercollegiate student-athlete an opportunity to compete on both regional and national levels, competing for New England and national championships. Under the auspices of the Northern New England Small College Conference (NNESCC), the Yankee Small College Athletic Association (YSCAA), and the United States College Athletic Association (USCAA), teams compete in men's and women's basketball, men's and women's volleyball, and men's and women's soccer as well as baseball and softball. Several teams have enjoyed great success in the past, advancing to regional and national tournament championship events, including a national Division II USCAA Men's Basketball Championship in 2005. Numerous NHTI student-athletes have also earned All-American honors. To learn more about the NHTI Capitals and their rich athletic tradition, visit the NHTI website at *www.nhti.edu* or call the Athletic Office at 603-271-6426.

## Intramural and Wellness Center Opportunities

Students may participate in a wide variety of intramural and wellness programs, both on and off campus.

The Dr. Goldie Crocker Wellness Center has a full gymnasium, as well as free weight and cardiovascular equipment fitness facilities. Outdoor facilities include soccer, baseball and softball fields, tennis, volleyball and basketball courts, and horseshoe pits. Activities include, but are not limited to, basketball, volleyball, indoor soccer, flag football, ultimate frisbee, golf, softball, cross country and downhill skiing, tournaments and special events, aerobics, conditioning clinics and health seminars.

Current students, faculty and staff are eligible to use the Wellness Center facilities. A current NHTI ID card, which has been validated by the Wellness Center and the Bursar's Office, is required. Verification of payment or arrangement for a payment plan to satisfy all applicable NHTI fees is required and can be obtained through the Bursar's Office.

The City of Concord can boast at having some of the finest parks and recreation facilities in the State of New Hampshire. The department offers a variety of programs, leagues, special events and instructional programs. The Concord area is conveniently located within a comfortable travel distance to an abundance of recreational, cultural, social and entertainment opportunities statewide.

## NHTI Alumni Association

The NHTI Alumni Association exists to provide former students a variety of opportunities to stay connected to classmates and to the College. Alumni can benefit by sharing job leads and career advice as well as gaining access to continuing education. Alumni assist the College in the recruitment of prospective students, mentoring current students and promoting NHTI and its graduates to prospective employers and the broader community. NHTI's alumni offer their ideas, experiences, expertise and financial support that help keep NHTI growing and going strong.

The Alumni Office produces a semi-annual newsletter, sends announcements of NHTI events, and organizes gatherings of alumni both on- and off-campus. Alumni benefits include access to temporary health insurance, privileges at NHTI's beautiful library and a classmate finder service.

Alumni can register at the NHTI alumni website (*www.nhti.edu/alumni*) or by contacting the Alumni Office at 603-271-8904 or by mail at Alumni Association, NHTI, 31 College Drive, Concord, NH 03301.

## *NEW* NHTI Student Center

NHTI's new Student Center, student-initiated and student-funded, will open in Fall 2005. It features 16,000 square feet of multi-use space including a great room, lounge space, games area and conference rooms and will be the hub for social, cultural, entertainment, and recreational activities for the NHTI campus. It will also be the new home for a variety of student services offices including: campus clubs and organizations; health and counseling services; campus activities and community service; residence life; and career and job placement.

## Orientation Program

New Hampshire Technical Institute has a unique orientation program to facilitate a smooth transition to college life. Students and their families have the opportunity to ask questions, to meet current students, alumni, faculty, and staff and become familiar with college organizations, activities and services.

## Residence Life

Residence living is an integral part of the total educational experience at NHTI. Every effort is made to provide opportunities for personal growth and development in a safe, secure and clean living environment conducive to the academic and personal development of the student.

Moving into the residence halls of NHTI represents the first time many of our students have lived away from home. The residence life staff is available to help students adjust quickly to their new environment. NHTI has three coeducational residence halls housing a total of 314 students. Each hall has a full-time professional Residence Director and a staff of Resident Assistants. The resident assistant staff is selected from successful second year students and receives training in all areas of student development from fire and safety concerns to peer counseling.

Assignment to housing in a NHTI residence hall is open to any student who carries a six credit class load for the academic semester. It is the policy of NHTI that any student who signs a residence hall contract must maintain that residence for the full academic year. Additionally, students living in the residence halls are required to purchase a meal plan from NHTI's food service.

## Service Learning

Community Service touches the classroom, through New Hampshire Technical Institute's commitment to Service Learning. Service Learning is the infusion of a community service project into the curriculum of a course, to enrich educational experience and to provide meaningful service to the community. A Service Learning Team, comprised of students, faculty and staff assists with the development of such courses and projects.

The college must ensure that individuals at service learning sites are not adversely affected by students during such learning experiences. Therefore, students participating in service learning experiences must demonstrate the emotional stability required to exercise sound judgement, accept direction and guidance from a supervisor or faculty member, and establish rapport and maintain sensitive interpersonal relationships with employees, customers and clients. During the 2003-2004 Academic Year over 140 students participated in Service Learning at NHTI through four disciplines.

The growth of community service initiatives at New Hampshire Technical Institute demonstrates the college's commitment to fostering participation in the life of the community.

## Student Clubs and Organizations

A student activity period is scheduled from 12 -2 p.m. on Tuesday of each week to provide time for students and faculty to participate in clubs and activities of special interest. Campus organizations include:

- Alternative Spring Break Club
- Campus Activities Board
- Christian Fellowship Club
- Criminal Justice Club
- The Cultural Exchange Club
- Drama Club
- Guild of Alternative Religions and Associated Sciences
- Hall Council (North, South and Strout Hall)
- Human Service Club
- National Education Association, Student Association at NHTI
- NH Junior Dental Assistants Association (NHJDAA)
- NHT "Eye" Student Literary Collection
- NHTI Film Society
- NHTI Gamers League
- NHTI Running Club
- Paramedic Student Organization (PSO)
- Phi Theta Kappa International Honor Society
- Recycling Club
- Roentgen Ray Society
- Society of Manufacturing Engineers (SME)
- Sports Management Club
- Student American Dental Hygienists Association (SADHA)
- Student Early Childhood Association (SECA)
- Student Nurses Association (SNA)
- Student Senate
- Sustainable Energy Ventures (SEV)
- Travel Society

### Student Government

NHTI encourages a democratic form of student government to develop individual initiative and a sense of group responsibility.

The Student Senate is responsible for NHTI affairs which are not academic in nature. The Senate is composed of elected representatives from all academic departments and is responsible for the promotion and coordination of student activities. The Student Senate President sits on the College's Institute Leadership Team.

### Professional Organizations

Most academic programs have professional organizations that promote integration into chosen fields of study.

Each association has elected officers and a planned agenda for the year. Whenever possible, these groups meet regularly during the academic day. These associations provide an opportunity for student/faculty-planned programs which provide supplementary and educational information.

### Phi Theta Kappa - International Honor Society

Phi Theta Kappa is the only internationally acclaimed honor society serving two-year colleges offering associate degree programs. Phi Theta Kappa seeks to recognize and encourage scholarship among students, develop opportunities for leadership, fellowship and services, as well as provide an intellectual climate for continued academic excellence. The name of NHTI's chapter is Alpha Upsilon Omicron.

Students need to complete 12 hours of college study at NHTI with a 3.5 minimum grade point average to be eligible for membership.

# ACADEMIC REQUIREMENTS AND POLICIES

## Academic Credits

Each course is assigned a number of credits based on the time obligated for formal enrollment in that course. The allocation of credits is normally according to the following formula:

One credit represents a) one hour of classroom work per week; or b) two or three hours of laboratory per week; or c) three to five hours clinical experience per week for a semester.

## Credit-By-Examination

In certain instances a student who has been accepted into a degree program may present evidence that would suggest that he or she may be eligible to receive credit for a course or courses either through aggregate educational experience or through some combination of occupational experiences. In such cases, an application for a credit-by-examination must be made within the first two weeks of a semester and be approved by the student's Department Head.

The head of the department offering the course will assign a faculty member who will discuss the subject area to be tested with the student and administer the test. A fee is required from the student for each examination administered under this policy. The fee is $25.00 per credit hour. The credit-by-examination will be comprehensive in nature.

Grades for credit-by-examination will be either "pass" (E grade) or "no pass," with full course credit granted for a grade of "E" (pass). A student receiving a grade of "no pass" in an examination representing a required course will be required to satisfactorily complete that course. Prior to 2005 students who passed a credit-by-examination were issued a "P" grade.

A student who has previously received a failing grade in a course (or less than "C" for transfer) may not request credit-by-examination in that course. *See Program Residency Requirement, p. 82.*

## Credit for Experiential Learning

Credit for experiential learning is available only through the Associate in Science in General Studies program. If a matriculated student in this program receives credit for experiential learning and later transfers to another NHTI degree or certificate program, that student must complete the required courses in the new program or take the appropriate credit-by-examinations. Exceptions to this policy may be made through consultation with the specific department head involved and the approval of the Vice President of Academic Affairs.

## Academic Progress

Any student whose academic progress is deemed less than acceptable by his or her department may be referred to the Academic Standards Committee. The Committee includes: the Vice President of Academic Affairs, who chairs the Committee; an elected representative of each of the academic divisions; the Vice President of Student Affairs; the Associate Vice President for Enrollment Management; and the Department Head of the department in which the student is enrolled. The Director of Counseling, the Registrar, and the Director of the Learning Center serve in advisory capacities. The Committee considers all pertinent aspects of each individual case and recommends action to be taken by the Vice President of Academic Affairs. That action may involve, but is not limited to, a warning, academic probation, suspension from a specific program or from the Institute as a whole for a specified period of time, conditional probation or dismissal. Dismissal is permanent.

All credit courses, regardless of the grade received, are used for this calculation. Students entering with advanced standing should add their transfer credits to those credits earned at the Institute to determine their positions in the guidelines.

In addition, any matriculated student registered for two or more courses during any semester will be subject to review by the Academic Standards Committee.

## Academic Warnings

At mid-semester, Academic Warnings are formally issued by faculty to students with grades of "C-" or below, "NP" or "PP." Warnings are submitted by faculty to the Registrar's Office from which formal mid-semester warning letters are mailed to students.

Warnings may also be issued at any time during a semester when deemed appropriate by faculty.

## Academic Probation

Academic Probation usually will last for one semester only. The student's Department Head will recommend to the Committee if a student can take courses in their major field during the Academic Probation. Students placed on Academic Probation may be eligible to continue receiving financial aid if they meet the minimum GPA requirements. To ensure that adequate academic progress toward a degree is being made, the Institute also uses the following guidelines in determining which students are automatically brought to the attention of the Academic Standards Committee:

| Total Credits Accumulated | Minimum Acceptable Grade Point Average |
|---|---|
| 0 — 13 | 1.5 |
| 14 — 27 | 1.7 |
| 28 — 40 | 1.8 |
| 41 or more | 2.0 |

## Suspension

Suspension may be for any period of time established by the Academic Standards Committee, but must be for a minimum of one semester excluding the summer semester (unless the summer semester is required by the student's program). A matriculated student suspended from a program may not take major field courses during the suspension in either the Day Division or the Division of Continuing Education. Non-major field courses, however, may be taken in either division at NHTI. In lieu of a department head or other faculty advisor, students under program suspension may seek course selection and academic planning help from the Academic Advising Office, Room S-148, Sweeney Hall. A matriculated student suspended from NHTI may not take any courses in either the Day Division or the Division of Continuing Education during the period of suspension. Students who have been suspended from the Institute or a program for academic reasons who wish to return must, prior to the completion of the suspension, apply for readmission by writing to the Director of Admissions.

- ***Guidelines for Suspension***

| Total Credits Accumulated | Minimum Acceptable Grade Point Average |
|---|---|
| 0 — 13 | .50 |
| 14 — 27 | 1.10 |
| 28 — 40 | 1.25 |
| 41 or more | 1.50 |

- ***Other Suspension Guidelines***
  1. NP or F in clinic *(see page 80)*
  2. Academic Probation status for 3rd consecutive semester.

## Conditional Probation Partnership

The Conditional Probation Partnership assists students whose cumulative GPA after the first semester is between .80-1.40. The Conditional Probation Partnership involves a contractual arrangement with the student incorporating mentoring/counseling elements. At the end of the

first semester, a Department Head designates students for this program when making the usual recommendations to the Academic Standards Committee. Students are recommended on the basis of the Department's judgment that they could reasonably be expected to achieve academic success with guided assistance and realistic academic goals. An agreement is then forwarded to the student along with a letter from the Vice President of Academic Affairs explaining that in lieu of suspension the student is being given an opportunity to continue, if he/she agrees to the conditions of the agreement.

The student is then asked to sign the agreement and return it to the Academic Affairs office by a predetermined date. If the student chooses not to sign the agreement, status will be determined by the guidelines for suspension or probation on *page 77*.

One requirement of the Conditional Probation is to attend an orientation session during the week before classes begin. Adjustments to the agreement may be discussed at this time and any changes in registration could also be processed.

### Appeal of Suspension or Dismissal

A student who wishes to appeal an academic suspension or dismissal may do so by writing a letter of appeal to the Academic Standards Committee and forwarding it to the Office of Academic Affairs. Each suspended or dismissed student receives a letter at the end of the semester specifying the deadline for filing the written appeal. The student should then plan on appearing personally before the Academic Standards Committee to present his/her appeal. All appeal hearings are scheduled on one day only, determined by the Vice President of Academic Affairs. Students whose letters arrive by the deadline are contacted by the Office of Academic Affairs to schedule their appearance before the Committee on the scheduled day.

## Add/Drop/Change Procedure

Day students may add a full semester course by notifying the Registrar's Office prior to the first meeting of the class in the second week of the semester*****. After that time, a course may be added only with the approval of the instructor and the department head through formal notification of the Registrar's Office by using an ADD form.

Evening students may add a full semester course prior to the first meeting of the class in the second week of the semester*****. After that time, a course may be added only with the approval of the instructor. To add an evening class, students must submit a registration form with the Division of Continuing Education.

Students who wish to change the section of their course may do so by notifying the Registrar's Office (for day students) or the Division of Continuing Education (for evening students) prior to the first meeting of the class in the second week of the semester. After that time, the student must submit a SECTION CHANGE form to the Registrar's Office.

A course must be dropped by notifying the Registrar's Office (for day students) or the Division of Continuing Education (for evening students) prior to the first meeting of the class in the second week of the semester in order to receive a 100% refund. After that time, the student must submit a DROP form to the Registrar's Office even though no refund is granted. Merely ceasing to attend classes does not constitute an official drop or withdrawal and may result in a grade of "F".

Officially dropping a course prior to the completion of 60% of the scheduled duration of a course will result in a grade of "W". After that time, a student must complete a drop form and request that the instructor issue a grade of "WP" or "WF" depending on the student's standing in the class at the time of the drop.

Exceptions require the approval of the Vice President of Academic Affairs.

****For courses in non 15-week formats, the above deadlines to add a course will be prorated accordingly.***

## Athletic Eligibility

Any matriculated student who has paid the student activity fee and has registered for at least twelve hours of course work in the current semester will be eligible to participate in intercollegiate***** athletics, provided other Institute/Conference eligibility guidelines are met.

A student will lose his/her eligibility to participate in any category described above if:

1. The student does not register for and maintain a minimum of 12 hours of course work in the current semester; or
2. The student does not pay the required student activity fee; or
3. More than one course is failed at the end of the preceding semester; or
4. The student does not maintain the minimum standards of academic progress as noted below:

| Total Earned Hours | Minimum Cumulative Grade Point Average |
|---|---|
| 0 — 13 | 1.5 |
| 14 — 27 | 1.7 |
| 28 — 40 | 1.8 |
| 41 or more | 2.0 |

***** *In the event that a student seeks eligibility to participate on an intercollegiate athletic team, conference rules, if more stringent, will take precedence over Institute regulations.*

## Attendance

Registration for any course presupposes that the student will participate in all scheduled activities, and students should expect that instructors will track attendance. In addition to academic issues relative to attendance, veterans and students receiving financial aid from some sources are expected to be in regular attendance as a condition of receiving such aid.

While occasional circumstances, over which the student has no control, may necessitate absence, the content presented in the activities missed by the student is a segment of a broad base of information being taught. For this reason, ***it is the policy of NHTI that, when the number of absences (for any reason) in a given course exceeds the number of times that course meets in one week (prorated for alternative format courses), the student may be suspended from the course at the discretion of the instructor.*** Such suspension will be indicated through the issuance of the grade of either "AD" (Administrative Drop; issued only prior to completion of 60% of the course) or "AF" (Administrative Failure; issued at any time).

Furthermore, ***a student who has not had contact with an instructor for two (2) consecutive weeks (prorated for alternative course formats) MUST be dropped from the class by the instructor***. A grade of "AD" or "AF" will be issued by the instructor under these circumstances.

Instructors may also, in addition to this policy, include an assessment of attendance behaviors (absence and tardiness) into their overall grading structure for the course. Such assessment strategies will be published in the course syllabus distributed at the start of the course. In addition, students suspended from clinical/practicum (or other field experience courses) may be suspended from other major field courses taken in the same semester at the discretion of the instructor and Department Head.

If illness, accident, emergency, or an NHTI-sponsored activity prevents a student from meeting attendance obligations under this policy, it is the responsibility of the student to inform faculty in a timely manner to discuss either the requirements for continued enrollment in the course or the options for withdrawal from the course.

Any student who has been suspended or dropped from a course under this policy may appeal following the procedures outlined in the Grade Appeal/Grade Change Policy, which is found on *page 80* of this catalog.

## Audit

Not all courses can be taken for audit. The term "audit" refers to enrollment in a course with the intent that neither a grade nor credit will be granted. Students enrolled in a course on an audit basis will (1) pay the full tuition for that course; (2) formally register at the start of the semester for that course as an auditing student; and (3) comply with all course

requirements for an audit as defined by the faculty member responsible for that course.

A non-matriculated student may audit a course provided that space is available and subject to the approval of the faculty member.

Matriculated students must receive the approval of their Department Head in order to audit a course. Students who are in a suspended or reduced load status as a result of action by the Academic Standing or Judicial Committee must also receive the approval of their Department Head.

Any exception to this policy must be approved by the Vice President of Academic Affairs. Audit courses do not count in establishing and maintaining full-time status.

## Change of Program

Currently enrolled matriculated students may request a change in their major program of study by using the "Change of Program Form" available in the Registrar's Office and the Admissions Office. Signatures must be received from the current major and new major Department Heads. Signatures do not guarantee or imply acceptance into the new program.

The request must be made within the ADD period at the beginning of a semester for the same semester.

Requests for the subsequent semester made after the ADD period will not take effect until after final grades for the current semester have been reviewed. The student will be informed of the decision in writing by the Admissions Office. *Students will follow the curriculum in effect for the semester to which they are accepted.*

When calculating the grade point average (GPA) for a student who has changed programs, all courses taken at NHTI as well as courses taken in the new program will be used to calculate the new cumulative GPA. For purposes of academic review the Academic Standards Committee will consider the student's semester by semester performance in the new program rather than the overall GPA.

## Clinical/Practicum/Internship Evaluations

Evaluations are conducted on all students who enroll in any course designated as a clinical, practicum or internship experience. It is the student's responsibility to understand the goals, objectives, and evaluation criteria of each clinic/practicum/internship and to adhere to all policies, rules, and procedures outlined by the student's department and/or clinic/practicum/internship site. Students enrolled in these educational experiences are evaluated not only on their technical skills and knowledge, but also on their behavior, attitude, and attendance, as well as adherence to policies, rules, and procedures set forth by NHTI, the academic department, and the participating agency to which the student is assigned.

A student will be removed from a clinic, practicum, or internship site and issued a grade of "AF" if performance or behavior is deemed unsatisfactory or unsafe as a result of a formal evaluation conducted by a faculty member/agency supervisor in accordance with published department criteria and procedures. In such situations, students are prohibited from receiving a "W" grade. In the event that a Withdrawal Form submitted by a student is processed prior to submission of the "AF" grade to the Registrar's Office, the student-initiated "W" grade will be replaced in the student record by the faculty-assigned "AF" grade.

## Course Substitution

A student may be eligible to substitute a higher-level course for the course prescribed in the curriculum if indicated by an evaluation of the student's competencies. The substitution can be made only with the joint approval of the student's Department Head and the Department Head of the area offering the course The approval form is available in the Registrar's Office. In addition, a student may substitute a comparable course from another program to meet degree requirements with the common agreement of the Department Heads and the approval of the Vice President of Academic Affairs.

## Course Waiver Policy

A course may be waived by the Director of Admissions in consultation with the Department Head of the course only if a higher level course has been completed at another accredited college or university with a grade of 'C' or higher. Waivers apply only to transfer of credits from accredited colleges or universities and not prerequisites for a given program.

*Students should be advised that a waiver is for the course only and that credit will not be awarded for the waived course. All students must complete a minimum of 64 credits to be awarded an Associate in Science or Associate in Arts degree. Students falling below 64 credits as a result of a waiver must make up the credits. Any make-up credits must have the approval of the student's Department Head.*

## Directed Study

Under certain circumstances, a matriculated student with a cumulative GPA of 2.0 or higher may take a course via Directed Study in a semester when the course is not offered either during the day or through the Division of Continuing Education. A Directed Study allows a matriculated student to pursue the published learning objectives/outcomes for a course independently under the guidance of a qualified faculty member. However, the student must explain why the course was not taken in a previous semester ***and*** demonstrate compelling reasons why the course could not be taken in a subsequent semester (e.g., adversely affects student's anticipated graduation date *in that semester*). Barring exceptional circumstances, a Directed Study *will not* be granted for a course currently being offered in the day or DCE division. Non-matriculated students are not eligible for a Directed Study.

A Department Head who requests that a student take a course via Directed Study must present a proposal to the Vice President of Academic Affairs detailing the rationale for the request, the specific learning activities that will be required of the student, and the specific assessment and evaluation tools that will be used to evaluate the student's learning. In addition, the proposal should identify the faculty member who will supervise the Directed Study. The *Directed Study Proposal Form* is available from the Academic Affairs Office and the Registrar's Office.

*A student may not take a Directed Study for a course which he/she has taken at NHTI and failed or for a course taken at another institution and received a grade that will not transfer to NHTI.*

The Vice President of Academic Affairs must give final approval to all proposals for Directed Study.

Grading of Directed Study projects will follow the standard NHTI policies and procedures.

## Enrollment Status

### Full-time & Part-time

Student enrollment at the Institute is defined according to the number of credits for which the student is enrolled, as follows:

*Full-time*: 12 or more credits in a semester;

*Part-time*: Fewer than 12 credits in a semester.

## Grading System

New Hampshire Technical Institute has implemented a letter grade system in which each grade reflects a level of achievement measured against specific course objectives.

| Letter Grade | | Definition |
|---|---|---|
| A | 4.0 pts | An honor grade representing achievement of a level of understanding and ability which is excellent and distinctive. |
| A- | 3.7 pts | |
| B+ | 3.3 pts | Represents achievement of a level of understanding and ability of consistently high quality. |
| B | 3.0 pts | |
| B- | 2.7 pts | |
| C+ | 2.3 pts | Represents achievement of a level of understanding and ability consistent |
| C | 2.0 pts | |

| | | |
|---|---|---|
| C- | 1.7 pts | with those levels required for successful entry into the student's chosen career field. |
| D+ | 1.3 pts | Represents some evidence of achievement, |
| D | 1.0 pts | but substantially below the level |
| D- | 0.7 pts. | required for successful entry into the student's chosen career field. |
| F | 0.0 pts | Represents negligible academic achievement. A student who receives an "F" grade in a course which is a prerequisite to other courses must repeat the failed course with a passing grade before being eligible to continue with the course sequence. |
| P | | Pass |
| E | | Pass grade issued for Credit-By-Examinations. Does not affect GPA. |
| PP | | Provisional pass; warning (in clinic courses). |
| NP | | No pass; unsatisfactory (in clinic courses). |

I Designates that course work has not been completed by the end of the semester due to extenuating circumstances such as illness. The work must be completed by the student through arrangement with the instructor no later than the midpoint of the following semester. In the case of an "I" during a spring semester, the next succeeding semester shall be defined as the following fall semester, unless the curriculum requires summer semester enrollment, in which case the summer shall be considered the next succeeding semester. Should the student fail to complete the work within this period, the grade will become an "F." "I" grades will not be included in the computation of Grade Point Averages.

AD Instructor initiated withdrawal from a course for failing to meet attendance requirements as published in the instructor's syllabus; must be issued prior to the last day to withdraw with a "W" grade (60%) and does not affect GPA.

AF Instructor or administrator initiated withdrawal at any time for reasons other than poor grade performance, e.g., failure to meet attendance requirements, as published in the instructor's syllabus, violation of the Student Conduct Code, disruptive behavior, etc. The grade may also be issued if a student registered in a clinic, practicum, internship or lab is deemed unsafe or performing in an unsatisfactory manner as determined by an evaluation by a faculty member/agency supervisor in accordance with department criteria and procedure. Calculated in GPA as "F".

W Issued to reflect an official drop/withdrawal from a course at any time prior to completion of 60% of the length of the course.

WF Student initiated withdrawal after the drop deadline; student has failing grade at time of withdrawal; calculated in GPA as "F".

WP Student initiated withdrawal after the drop deadline; student has passing grade at time of withdrawal; does not affect GPA.

AU Audit (no credit, no grade). Does not count toward course load for any semester.

## Grade Appeal/Grade Change

Any appeal of a grade must be initiated by the student with the instructor before an ensuing semester has elapsed. Students should be advised that in most instances a grade may be changed only by the instructor. Only in a case of obvious computational error or blatant abuse of the grading prerogative, can the Vice President for Academic Affairs (VPAA), the only other individual on campus empowered to change a grade, alter a student's grade.

Students who believe they have a valid ground for a grade appeal will use the following process to resolve the issue:

1. *Meet with the instructor.* The student shall contact the faculty member and schedule a meeting to discuss the grade appeal and attempt to resolve the conflict. The faculty member and student shall meet within the next five (5) work days.
2. *Meet with the Program Director/Department Head.* If the issue was not resolved in Step 1, the student has three work days from the date of the faculty member's decision to file a written appeal with the faculty member's Program or Department Head, or with the VPAA if the faculty member is also the Department Head or Program Director. Within three work days the Department Head (or VPAA) will mediate the dispute either through discussion with the instructor, or with the student in the company of the faculty member. If no resolution is reached, proceed to step 3.
3. *Meet with the VPAA.* If the issue is not resolved in Step 2, the student has three work days to file a written appeal with the VPAA. The VPAA will meet with all parties concerned within the next three work days to attempt to resolve the dispute. The VPAA will have three work days from the last meeting to render a decision on the grade appeal. The decision of the VPAA is final.

***Note:*** During the summer, when faculty are not on campus, students may begin the grade appeal process with the Office of Academic Affairs. Every attempt will be made to have the faculty member contact and meet with the student within the specified time. On occasion, however, these times may need to be adjusted.

## Plagiarism/Cheating Policy and Procedures

1. Faculty will gather all material evidence (e.g., papers, crib notes, copied materials and the source(s) from which it came, et al.) If the charges have arisen from an inconsistency in quality, prior work samples, along with the work in question, should be presented to the student. Names of those who have pertinent knowledge of the situation will also be presented.
2. Once the information is gathered a meeting between the individual faculty member and the accused should be held within 5 class days (or within 5 business days of a final exam) to discuss the matter. All parties shall maintain confidentiality at this point. The faculty member, however, may seek advice/counsel from his/her Department Head. The student may seek advice/counsel from an individual of his/her choice.
3. Following the meeting the faculty member shall have the following options available if he/she feels disciplinary action is warranted:
   a. Have the student redo the assignment or do a different assignment;
   b. Reduce the student's grade a specified amount;
   c. Give the student an "F" grade for the assignment;
   d. Give the student an "AF" or "F" grade for the course;
   e. Issue the student a letter of sanction (copies to Registrar and student's Department Head);
   f. Other options as appropriate, not including those outlined in #4 below.
4. Options available needing the approval of the Department Head and Vice President of Academic Affairs:
   a. Suspend the student from the program or the Institute for one semester;
   b. Suspend the student from the program or the Institute for more than one semester;
   c. Dismiss the student from the program or the Institute;

   The faculty member's decision will be put in writing to the student within two class days of the meeting. If another student, not in the class, was complicit in the cheating/plagiarism, the faculty member has the obligation to pursue disciplinary action against that student. Disciplinary action against a student not in the class would be limited to 3e and f or 4a-c above.
5. A student may appeal actions covered in number 3a-d above through the Grade Appeal/Grade Change process (*p. 80 of the NHTI catalogue*); a student may appeal actions covered in 3e and 4a-c above

through the Student Judicial process (*The Student Judicial process section of the Student Handbook at www.nnti.edu, p. 41*).

## Grade Point Average

The Grade Point Average (GPA) is indicative of the overall quality of performance of a student. It is used by academic institutions and prospective employers as a means of describing academic achievement.

Three factors are used in computing the GPA: credit hours, point value, and letter grade earned. Letters such as A, B, B+, and C have point values.

For example, if a student is enrolled in five courses carrying 4, 4, 6, 3 and 5 credits and earns grades of B+, C-, A, D, and C respectively, his or her GPA for the semester would be calculated in the following manner:

| Letter Grade | Credits | | Point Value | = | Grade Points |
|---|---|---|---|---|---|
| B+ | 4 | X | 3.3 | = | 13.2 |
| C- | 4 | X | 1.7 | = | 6.8 |
| A | 6 | X | 4.0 | = | 24.0 |
| D | 3 | X | 1.0 | = | 3.0 |
| C | 5 | X | 2.0 | = | 10.0 |
| | 22 | | | | 57.0 |

The GPA is calculated by multiplying the number of credits times the point value, then dividing the sum of the grade points (57.0 in the example) by the sum of the credits (22 in the example). The GPA in the example is 2.59.

The cumulative GPA for all semesters the student has been at the Institute may be calculated in the same manner by using total credits and total grade points.

# Graduation

New Hampshire Technical Institute holds one commencement ceremony in May of each year.

Except for those programs which are regularly scheduled to end during the summer, students must achieve a 2.0 or higher GPA for all courses required in the curriculum from which the student is graduating to participate in the annual commencement ceremony. A student whose program is regularly scheduled to be completed the summer term following the May commencement (Dental Assisting, e.g.) may participate in the ceremony. However, at the end of the Spring semester the student must have achieved a minimum GPA of 2.0 and complete all other course requirements to be eligible to participate. All other students who complete their program requirements during the Summer term or at the end of the Fall semester are encouraged to participate in the subsequent May commencement. Degrees are officially awarded on the following schedule:

**August - following the Summer term**
**December - following the Fall term**
**May - during Commencement**

Potential graduates must file an "Intent to Graduate" form according to the following schedule:

**Fall 2005 Completions – October 28, 2005**
**Spring 2006 Completions – October 28, 2005**
**Summer 2006 Completions – April 24, 2006**

All forms must be signed by the Department Head of the academic program in which the degree will be conferred.

All students filing "Intent to Graduate" forms will be charged the required $75.00 graduation fee. The fee is refundable ONLY to persons who do NOT meet graduation requirements.

A nominal fee will be charged for replacement of a diploma.

All financial and other obligations to the College must be met for degrees, diplomas, and transcripts to be released.

## Basic Graduation Requirements

The degrees of Associate in Science, Associate in Arts, Associate in Engineering Technology, or a Diploma, whichever is applicable, will be granted to students who satisfactorily complete the programs in which they are enrolled.

Satisfactory completion is defined as the achievement of:

1. A passing grade for all courses required by the specific program;
2. A 2.0 or higher GPA for all courses required in the curriculum from which the student is graduating;
3. All Associate Degrees must have a General Education core. The General Education core consists of courses that are drawn from the sciences, the social sciences, the humanities, and other courses which prepare the student for life experiences. They are essential elements in the achievement of identified competencies and are not directed toward specialized study or specific occupational or professional objectives. *See page 84 for courses that fulfill these requirements.* Courses fall into the areas as follows:
   - English Composition and Literature or Communication — 6 credits
   - Science — 3 credits
   - Math — 3 credits
   - Social Science — 3 credits
   - Humanities/Fine Arts/Foreign Language — 3 credits
   - Liberal Arts electives (from categories of English, Science, Math, Social Science and/or Humanities/Fine Arts/Foreign Language) — 6 credits

   *Total credits required in General Education area = 24 credits*
4. Associate Degree Candidates must complete a minimum of 64 credits and all program requirements.

## Additional Associate Degrees

Students may earn additional associate degrees either by concurrent completion of the requirements of the several degrees or by subsequent study after the first degree is received. The requirements for earning additional degrees are as follows:

1. Complete all requirements of each program of study, including general education requirements; ***and***
2. Earn a minimum of 15 additional credits at the college, beyond those required for the first and subsequent degrees.

## Completion/Graduation Rate

As required by the U.S. Department of Education, 34 CFR Part 668, Student Assistance General Provisions, "An institution shall make readily available to all enrolled students and prospective students, through appropriate publications and mailings, the Institution's completion and graduation rate (or a projected completion or graduation rate) of its full-time degree-seeking undergraduate students who enroll for the first time "at NHTI " and have not previously enrolled at any other institution of higher education."

Of the 539 full-time, first-time degree/certificate-seeking students entering NHTI in Fall 2001, 170 completed their programs within 150% of the normal time, resulting in a graduation rate of 32%.

# Honors Courses

NHTI offers honors courses for highly motivated students who are academically strong and committed to learning. Course offerings typically allow students who qualify to participate in smaller classes in a stimulating and creative environment that promotes active engagement with subject matter, and allows for a rigorous and individualized approach to learning. Honors courses may also benefit students who transfer to other colleges or apply to competitive programs at NHTI. Students who complete honors courses receive an honors designation on their transcript. Selection is based on a variety of criteria which may include NHTI assessment test scores and/or scores on nationally recognized standardized tests. Each course which offers an Honors section will be identified in the Course Description section in the catalog. Questions about admission to honors courses may be directed to the Office of Academic Affairs.

# Inactive Status

Students in good standing who are matriculated in Allied Health programs (Nursing, Paramedic Emergency Medicine, Radiation Therapy,

Radiologic Technology, Dental Assisting, Dental Hygiene) and who interrupt their education by not enrolling in the subsequent semester (including Summer where applicable) will be declared inactive and no longer considered a student in the program. The student must then file a request for readmission through the Admissions Office. Students will be admitted pending available space.

In all other programs, students in good standing who interrupt their education by not enrolling for three consecutive semesters (including summers) will be declared inactive and no longer considered a student in the program. The student must file a request for readmission through the Admissions Office. Students will be admitted pending available space.

## Independent Study

Opportunities for credit-bearing Independent Study are available to matriculated students with a cumulative GPA of 2.0 or higher who wish to explore areas of a discipline not covered in the normal curriculum. **Independent Study is not available to non-matriculated students.**

The intention of Independent Study is to expand a student's learning experience beyond the normal program curriculum. Therefore, an Independent Study cannot be taken in lieu of any course existing in any of NHTI's catalogues. Students wishing to pursue existing NHTI courses on an independent basis should consult the NHTI policy on Directed Study.

Students wishing to take advantage of an Independent Study opportunity must consult with a supervising faculty member to prepare a proposal detailing the specific learning outcome(s) to be pursued, the specific learning activities that will occur, and the specific forms of assessment and evaluation that will be used to determine the final grade. In addition, the proposal should indicate the number of credits requested for the Independent Study (usually 1-2 credits). The *Independent Study Proposal Form* is available from the Academic Affairs Office and the Registrar's Office.

The student must obtain the following signatures as indicated on the form: the student's Department Head; the faculty member who will supervise the learning experience; the Department Head of the supervising faculty member; and the Vice President of Academic Affairs. Grading of Independent Study projects will follow the standard NHTI policies and procedures.

Exceptions to the above policy require approval from the Department Head and the Vice President of Academic Affairs.

## Name and/or Address Changes

In order that all NHTI correspondence reach students, up-to-date names and addresses must be on file. Name and/or address change forms may be obtained in the Registrar's Office, completed as appropriate, and returned to the Registrar's Office.

## Prerequisite and Corequisite Courses

Many courses at NHTI are dependent upon knowledge learned in preceding courses. NHTI requires that students pass all listed prerequisite courses prior to proceeding with courses for which there are prerequisites. Prerequisite courses may be waived only with the prior approval of the head of the department in which they are taught. Such a waiver does not, however, suggest that those prerequisite courses need not be taken, but only that credit for them may be gained at a subsequent time.

Corequisite courses are those that must be taken concurrently (at the same time) with another course, as listed in a particular course description. (Note that with departmental permission, a corequisite course may sometimes be taken in advance of the course for which it is a corequisite.)

## Program Residency Requirements

To be eligible to receive an NHTI degree, a student must satisfactorily complete a minimum of 16 credits of course work in NHTI-controlled courses with at least half of these credits in last semester major field courses. Exceptions to this policy require the approval of the Vice President of Academic Affairs and the Academic Standards Committee.

## Repeated Courses

A student may repeat a course for credit one time. Registration for further repetitions of the same course will require permission from a matriculated student's Department Head or, for a non-matriculated student, from one of the college's academic advisors. The student's Cumulative Grade Point Average will reflect the most recent course and resulting grade, even if the most recent grade is lower than previous grades; however, both courses and corresponding grades will appear on the student's transcript. In addition, students wishing to repeat a course should consult with the Financial Aid Office to re-assess their continuing Financial Aid eligibility status.

## Scholastic Honors

### Dean's List

New Hampshire Technical Institute publishes a Dean's List at the end of each semester. It includes the names of all full-time students whose Grade Point Average (GPA) for that semester is 3.3 or higher. Students who achieve a cumulative GPA of 3.7 or higher are graduated with high honors, and those who achieve a cumulative GPA of 3.3 to 3.69 are graduated with honors. Cumulative GPA will be calculated using all courses taken at NHTI.

### Vice President's Award for Academic Excellence

The Vice President's Award for Academic Excellence is presented each year at the May Commencement to the student(s) achieving the highest overall cumulative Grade Point Average in the graduating class. The following criteria apply for this award only:

1. A minimum of 48 credit hours must be used in the calculation of the cumulative GPA;
2. All students are eligible for the award, including those who have exercised Academic Amnesty (*see page 7*), those who have changed programs, and those who have previously graduated from an NHTI program;
   a. For purposes of this award, students who have previously graduated from an NHTI program will have their GPA calculated using courses taken in the new program and any prior courses that may be applicable in the new program;
   b. Students who have exercised the Academic Amnesty option will have their GPA based only on courses taken after the option has been exercised. No previous courses will be used;
   c. Students who have changed majors will have their GPA calculated on the basis of <u>all</u> courses taken at NHTI and not just those in the new program.

## Transcript Requests

Transcripts of students' NHTI grades are available from the Registrar's Office. Requests must be in writing and may be faxed (603) 271-6431 - Attn: Registrar) or mailed to the Registrar's Office. Requests must include the following information:

1. Name while attending NHTI;
2. Social security number;
3. Program of study at NHTI;
4. Dates of attendance and/or graduation;
5. Address where you would like the transcript sent;
6. Student's signature must accompany written request.

Each student is entitled to two (2) free transcripts. Additional transcripts cost $3.00 each. Should the student request that a transcript be faxed, the additional cost will be $5.00 per transcript. There is no fee for a student transcript issued from one New Hampshire Community Technical College to another.

**Please note:** transcripts will not be issued if a student has a past due balance on his/her account or if the student is in default on student loan payments.

## Student Information System

Students may access their personal information on-line using the Student Information System. Class schedules and final grades are no longer mailed. Class schedules, mid semester warning grades, final grades, account information, financial aid status, and academic history may be obtained by logging on to NHTI's home page at *www.nhti.edu*.

Contact the Registrar's Office at (603) 271-7142 with questions regarding the Student Information System or to request official grade documentation.

## Transferring to Other Institutions

Department Heads and the Career Counseling and Placement Office assist students who wish to continue their education at other colleges or universities. A number of formal and informal articulation agreements exist and some are specific to particular majors. While some of these agreements are listed by major in the "Programs of Study" section of this catalog, students who plan to transfer to other colleges or universities should meet with their Department Head, the Director of Career Counseling and Placement and the affiliated institution for advice and assistance. Please see specific academic program pages for listings of institutions with which NHTI has current affiliations.

### Disclaimer

Transfer policies vary from institution to institution. The receiving college or university has sole discretion in determining the credits to be awarded. Students should not make assumptions about which credits are transferrable even if an articulation agreement exists. Whether a student is transferring into or out of NHTI, it is the student's responsibility to contact the appropriate person at the receiving institution in order to discuss their policy, learn what documentation is required and, finally, to determine and confirm transferrable credit.

## Underenrolled Day Classes

NHTI reserves the right to cancel a class that it deems underenrolled. Students are advised that occasionally a day class may be cancelled for insufficient enrollment, and students will be asked to attend that same class, if it is also available in the evening, through the Division of Continuing Education. However, NHTI recognizes its obligation to run courses in the semesters indicated in the program curriculum section of the catalog. Therefore, NHTI will not cancel a day class unless the same or a comparable course is available in the same semester in the evening.

## Withdrawal from NHTI

Should a matriculated student find it necessary to withdraw from all courses at NHTI, the Registrar must be notified in writing or by receiving an Institute Withdrawal Form from the student.

An exit interview with the Associate Vice President for Enrollment Management is requested. Such withdrawal is subject to the same academic policy as applies to dropped courses. If such withdrawal occurs at the 60% or later period, the student is subject to the same academic assessments and actions as students completing the semester.

Students who have officially withdrawn in good standing may apply for readmission by writing to the Director of Admissions and will require no action by the Academic Standards Committee.

# GENERAL EDUCATION REQUIREMENTS

The following list is provided so that students can determine which courses are appropriate in fulfilling General Education requirements in the areas of Communications, Literature, Humanities/Fine Arts/Foreign Language, Mathematics, Science and Social Science. In programs where a General Education Elective is indicated, courses may be selected from any of the categories. Credits are indicated in parentheses.

**COMPOSITION**

EN 101 English Composition (4)

**COMMUNICATIONS**

EN 104 Communication Systems within Organizations (4)
EN 120 Communications (3)
EN 125 Communication and the Literature of Science and Technology (3)

**LITERATURE**

EN 102 Introduction to Literature (3)
EN 150 Introduction to Drama (3)
EN 160 Introduction to Poetry (3)
EN 210 British Literature I (3)
EN 211 British Literature II (3)
EN 214 American Literature Survey I: to 1865 (3)
EN 215 American Literature Survey II: 1865 to the Present (3)
EN 251 Contemporary Drama (3)
EN 255 Shakespeare (3)
EN 272 Modern American Short Fiction (3)
EN 285 Literature, Technology and Culture (3)
EN 287 Women in Literature (3)
EN 291 Contemporary Issues and World Literature (3)
EN 295 Creative Writing: Fiction (3)

**HUMANITIES**

*All literature courses above plus the following:*
EN 121 Introduction to Film (3)
EN 221 Film Genres and Directors (3)
HI 104 Western Civilization: Antiquity to 1650 (3)
HI 105 Western Civilization: 1650 to Present (3)
PI 110 Introduction to Philosophy (3)
PI 242 Contemporary Ethical Issues (3)

**FOREIGN LANGUAGE**

FL 104 American Sign Language for Beginners (3)
FL 105 Advanced American Sign Language (3)
FL 110 Elementary Japanese I (3)
FL 111 Elementary Spanish I (3)
FL 112 Elementary Spanish II (3)
FL 115 Elementary German 1 (3)
FL 116 Elementary German 2 (3)
FL 121 French I (3)

**FINE ARTS**

FA 101 Introduction to Drawing (4)
FA 102 Introduction to the Visual Arts (3)
FA 103 Two-Dimensional Design (3)
FA 104 Three-Dimensional Design (3)
FA 105 Introduction to Music (3)
FA 106 The History of Jazz, Blues and Rock and Roll (3)
FA 110 Art Appreciation (3)
FA 111 Survey of Western Art History I (3)
FA 112 Survey of Western Art History II (3)
FA 115 History of Modern Art (3)
FA 120 Introduction to Oil Painting (4)
FA 125 Introduction to the Traditional Arts (4)
FA 130 Introduction to Photography (4)
FA 135 Introduction to Ceramics (4)
FA 150 Introduction to Guitar (3)
FA 201 Drawing II (4)
FA 220 Painting II(4)

**SOCIAL SCIENCE**

AN 101 Introduction to Anthropology (3)
AN 110 Introduction to Archaeology (3)

***Social Science continued...***

AN 210 Native American Studies I (3)
ED 104 Foundations of Education (3)
EO 101 Macroeconomics (3)
EO 102 Microeconomics (3)
HI 120 United States History: to 1870 (3)
HI 121 United States History: 1870 to present (3)
HI 131 World History I: to 1500 (3)
HI 132 World History II: 1500-present (3)
HI 221 New Hampshire History (3)
PS 105 State and Local Government (3)
PS 120 American Federal Government (3)
PS 231 American Government (3)
PY 105 Introduction to Psychology (3)
PY 205 Crisis Intervention (3)
PY 209 Educational Psychology (3)
PY 210 Abnormal Psychology (3)
PY 220 Human Growth and Development: The Life Span (3)
SO 105 Introduction to Sociology (3)
SO 111 Education and Society (3)
SO 205 Social Psychology (3)
SO 212 Intercultural Interactions and Cultural Learning (3)
SO 226 Special Topics in Social Science (3)
SO 240 Marriage, Family and Personal Relationships (3)
SO 298 Study Abroad Experience (3)

**SCIENCE**

BI 111 General Biology I (4)
BI 112 General Biology II (4)
BI 115 Introduction to Ecology (4)
BI 120 Human Biology (4)
BI 122 Basic Pathophysiology (3 no lab)
BI 123 The Biology of Human Reproduction (3 no lab)
BI 125 Human Genetics and Society (4)
BI 159 Personal Nutrition (4)
BI 195 Anatomy and Physiology I (4)
BI 196 Anatomy and Physiology II (4)
BI 202 Microbiology (4)
BI 211 Genetics (4)
BI 212 Ecology (4)
BI 222 Pathophysiology (3 no lab)
BI 259 Normal and Therapeutic Nutrition (4 no lab)
BI 279 Life Cycle Nutrition (3 no lab)
CH 103 General Chemistry I (4)
CH 104 General Chemistry II (4)
CH 105 Chemistry (4)
CH 110 Introduction to Biochemistry (4)
CH 120 Introduction to Forensic Science (4)
CH 205 Organic Chemistry (4)
PH 133 Physics I (4)
PH 135 Physics II (3)
PH 202 Physics IIa (2)
SC 104 Astronomy and Space (4)
SC 107 Introduction to Meteorology (4)

**MATH**

MT 120 Contemporary College Math (4)
MT 123 Intermediate Algebra (4)
MT 125 Finite Mathematics (4)
MT 129 Math for Allied Health (3)
MT 133 Elementary Functions (5)
MT 134 Pre-Calculus (4)
MT 205 Calculus I (4)
MT 206 Calculus II (4)
MT 251 Statistics (4)

# COURSE DESCRIPTIONS

***Please note***: Courses are listed in alphabetical order by subject heading.

Number sequencing to the right of the course name means the following: **first digit** designates the number of lecture hours for the course; the **second digit** designates the number of lab, clinic or practicum hours; and the **third digit** designates the credit hours for the course.

***Prerequisite***: a course that must be passed prior to proceeding with a more advanced course; minimum passing grade for a prerequisite course is a "D minus" *unless otherwise indicated.*

***Corequisite***: a course that must be taken concurrently (at the same time) with another course. (Note that with permission of department head of Business Administration, a corequisite course may sometimes be taken in advance of the course for which it is a corequisite.)

## Accounting

**AC 101 Accounting I** **3-0-3**
An introduction to accounting procedures and principles covering the accounting cycle, accounting for a merchandising business, special journals, control over cash, receivables, and inventories. A grade of C- or higher must be achieved to continue with the next accounting course.

**AC 102 Accounting II** **3-0-3**
A continuation of the fundamentals of accounting concepts and procedures, including the following topics: depreciation, payroll, notes payable, bonds, partnerships and corporations. A grade of C- or higher must be achieved to continue with the next accounting course. (Prerequisite: a grade of C- or better in AC 101)

**AC 205 Intermediate Accounting I** **4-0-4**
A review of the overall accounting cycle, followed by an in-depth study of accounting concepts and FASB statements dealing with topics to include balance sheets, income statements, receivables, inventories, and cash flows. (Prerequisite: AC 102)

**AC 206 Intermediate Accounting II** **4-0-4**
A study of accounting principles dealing with asset acquisition and retirements, long term investments, current and contingent liabilities, debt securities and equity securities, capital structure of corporations, revenue recognition, and leases. (Prerequisite: AC 205)

**AC 230 Taxes** **4-0-4**
A study of the Internal Revenue Tax Code as it relates to individuals and small businesses. This course will include an examination of income recognition, deductions for and from AGI, tax credits, depreciation calculations and analysis of capital gains and losses. The student will apply this knowledge in preparation of income tax returns and related forms. (Prerequisite: AC 102 or permission of department head of Business Administration)

**AC 250 Cost Accounting** **3-0-3**
Provides cost accounting fundamentals including manufacturing statements, job cost systems, process cost systems, standard costs and cost analysis. (Prerequisite: AC 102)

## Addiction Counseling

**AD 115 Fundamentals of Criminal Justice-Oriented Addiction Treatment** **3-0-3**
The course will focus on those modalities of addiction treatment that are conducted with the criminal justice population. The student will be prepared for employment in diversion programs, drug courts, prison-based treatment programs, multiple offender programs, prison-based halfway houses, therapeutic communities, methadone maintenance and other detoxification programs. Appropriate interaction with criminal justice/addiction treatment personnel will enable the student to work cooperatively within their shared systems. The writing of assessment and global individual service plans for use in course and mandated treatment will be studied. Patient monitoring and logical consequences methodology for clients will be learned. (Prerequisites: CJ 101, AD 120 and MH 187)

**AD 120 Survey of Addictive Behaviors and Treatment** **3-0-3**
A study of addictive behaviors and treatment from a multi-modal presentation of historical, sociological, political and medical issues and their importance relative to the treatment of addictive behaviors in today's society.

**AD 205 Fundamentals of Dependency Counseling Skills** **3-0-3**
This course includes a comprehensive and detailed study of application both in documentation and treatment of the 12 core functions. Emphasis will be on preparation for on-site practice and for eventual state and national licensure and certification. (Prerequisite: AD 120 or permission of department head of Human Service)

**AD 215 Internship: Orientation to Addictive Behaviors Counseling with Criminal Justice Clients** **2-12-6**
This internship experience offers 30 hours of classroom-based clinical supervision in support of 180 hours of field work in an approved criminal justice addiction treatment setting. The student, supervised by a Licensed Alcohol and Drug counselor experienced in criminal justice treatment techniques will, through observation and actual clinical contact, practice the fundamental skills of counseling addictive behaviors with criminal justice clients. (Prerequisites: CJ 101, AD 120, MH 185, CJ 150, CJ 215 and AD 115, with a minimum combined GPA of 2.0)

**AD 235 Physiology and Pharmacology of Addiction** **3-0-3**
An in-depth study of psychopharmacological aspects of drugs is covered including a study of brain and body drug metabolism, medical complications and the treatment of psychiatric disorders as outlined in the DSM-IV. Alcohol and drug detoxification and sobriety maintenance and practices will be addressed. (Prerequisite: BI 120 or permission of department head of Human Service)

**AD 270 Advanced Seminar in Addictive Behaviors Counseling** **3-0-3**
A study of addictive behaviors counseling modalities and skills appropriate to the specific needs of varied client/patient populations in different treatment settings. Clinical case study will be directed toward familiarization with the process of state Licensed Alcohol and Drug Counseling (LADC) application, written case format submission, and the written and oral credentialing examinations. (Prerequisites: all AD courses; corequisite: AD 295)

**AD 294 Internship I: Orientation to Addictive Behaviors Counseling*** **2-12-6**
The first internship experience offers 30 hours of classroom-based group clinical supervision in support of 180 hours of field work in an approved clinical setting. The student initially learns to integrate into an agency atmosphere within which they may research, observe, role-play and prac-

tice the fundamental skills of screening, intake, orientation, assessment, treatment planning, counseling, case management, crisis intervention, client education, referral, record keeping and consultation. (Prerequisites: AD 120, AD 205, HU 111, MH 185, PY 105, PY 220 and PY 283, with a combined major field GPA of 2.0)

**AD 295 Internship II: Orientation to Addictive Behaviors Counseling* 2-12-6**
The second internship experience offers 30 hours of classroom-based group clinical in support of 180 hours of field work in an approved clinical setting. The student assumes increased responsibility culminating in substantial use of the fundamental skills of screening, intake, orientation, assessment, treatment planning, counseling, case management, crisis intervention, client education, referral, record keeping and consultation in direct contact with clients/patients. A greater understanding of available treatment resources is accomplished via an inspection of the statewide continuum-of-care. (Prerequisite: AD 294)

**AD 296 Addiction Practicum I* 2-8-4**
The first internship experience offers 30 hours of classroom-based group clinical supervision in support of 125 hours of fieldwork in an approved clinical setting. The student initially learns to integrate into an agency atmosphere within which they may research, observe, role-play and practice the fundamental skills of screening, intake, orientation, assessment, treatment planning, counseling, case management, crisis intervention, client education, referral, record keeping and consultation. (Prerequisites: AD 120, AD 205, HU 111, MH 187, PY 105 and PY 283, with a combined major field GPA of 2.0; PY 220 may be taken as a pre-or corequisite)

**AD 297 Addiction Practicum II* 2-8-4**
The second internship experience offers 30 hours of classroom-based group clinical supervision in support of 125 hours of fieldwork in an approved clinical setting. The student assumes increased responsibility culminating in substantial use of the fundamental skills of screening, intake, orientation, assessment, treatment planning, counseling, case management, crisis intervention, client education, referral, record keeping and consultation in direct contact with clients/patients. A greater understanding of available treatment resources is accomplished via an inspection of the state-wide continuum-of-care. (Prerequisite: AD 296)

***** *The student will also complete an interview with the practicum coordinator the semester prior to the first scheduled practicum. Special requests regarding practicum entrance may be brought to the department head by the student. Review of the requests will be made by the department faculty and special exemptions may be made for entrance into the practicum.*

## Anthropology

**AN 101 Introduction to Cultural Anthropology 3-0-3**
This course is an introduction to the perspectives, methods, and ideas of cultural anthropology and will analyze human diversity and similarities among people throughout the world, both western and non-western, through cross-cultural comparison. Topics include: culture and society; ethnographic research; ethnocentrism and cultural relativism; how societies adapt to their environment; different forms of marriage and social relationships; male, female and other forms of gender; the social functions of religion; and the processes of social-cultural change.

**AN 110 Introduction to Archaeology 3-0-3**
This introductory course examines the scientific tools and sophisticated research that are currently changing our ideas about ancient civilizations. In the last 40 years, archaeologists have discovered many keys that dramatically unlock mysteries out of the past. Students will understand how archaeology and anthropology interact, with emphasis on how people behaved in the past, with reconstruction of basic social, political and economic institutions of their culture.

**AN 210 Native American Studies I 3-0-3**
A study of North American Indian cultures from the lithic period to the 21st century. Origin of Native American civilization and development will be studied, including: lifeways, religion, ceremonies, arts and social organizations. The course will first focus on Mesoamerica during the pre-Columbian period. The study then proceeds to an in-depth review of the people/tribes of the Northeastern and southeastern woodlands and the Great Plains cultural area.

## Architectural Engineering Technology

**AR 101 AutoCAD 2D 3-0-3**
This is an introductory course in Computer-Aided Drafting (CAD) for beginning students. Topics include drawing set-up, line drawing, text placement, orthographic drawing, basic editing, and dimensions. This hands-on course, using AutoCAD 2002, focuses on the most common basic functions necessary to complete 2-D drawings including move, mirror, copy, offset, trace, OSNAP, distance, and more. Projects incorporate basic techniques of drawing and computer-aided drafting. *This course is part of the CAD Certificate program. Note: Students are expected to be able to read and interpret architectural/engineering graphics to register for this course.*

**AR 102 AutoCAD 3D 3-0-3**
This course introduces students to architectural three-dimensional CAD applications, 3-D manipulation of entities and to create and control views in 3-D space through Isometric and perspective projections. Topics include three-dimensional drawing, coordinate systems, viewing, rendering, modeling, and output options. Upon completion, students should be able to prepare basic architectural three-dimensional drawings and renderings. *This course is part of the CAD certificate program.* (Prerequisite: AR 101 or permission of department head of Architectural Engineering Technology)

**AR 103 Architectural Graphics and Sketching 2-2-3**
The first semester is devoted to the basic ways of representing architectural ideas graphically through the development of sketching and computer-aided-drawing (CADD) skills. Architectural line techniques, lettering styles, geometric construction, principles of projection and drawing expression are the areas of early concentration. Architectural design issues are studied regarding residential planning and siting. The student produces floor plans, foundation plans, site plans, elevations, building sections, wall sections and details. An introductory structural analysis for foundation loading is explored. Production of drawings by sketching and CAD demonstrates the student's ability to perform. (Corequisite: AR 120) *Note: CAD certificate students taking this course will not be required to register for AR 120.*

**AR 104 Architectural Design Studio I 2-2-3**
The student will study the architectural design for an institutional building that is designated for public use. The terrain is sloping and provides for a two-story sloped roof structure that employs current construction methods. The student begins study through the use of sketch-to-scale drawings. With an outline of design criteria and project guidelines, the student develops preliminary presentation drawings for floor plans, elevations and 3-dimensional views. As the student comes to know and appreciate the design, the emphasis shifts to a more in-depth understanding of the technology of construction. The student prepares construction documents for floor plans, elevations, building sections, wall sections and details. The preparation of preliminary drawings and construction documents include sketching to scale and CADD using AutoCAD Architectural Desktop software. The student demonstrates competency by studying, discussing and producing these drawings and presenting them to the class as a way of working on relevant verbal skills. (Prerequisites: AR 103 and AR 120)

**AR 120 Materials and Methods of Construction 4-0-4**
A survey of the materials used in building construction, the methods used in assembling these materials into structures, and the forces acting on

structures. Included are the characteristics and properties of each material and their relative cost. Materials and methods studied include site work, concrete, masonry, metals, wood and plastics, thermal and moisture protection, doors and windows, and finishes.

**AR 150 Statics and Strength of Materials 3-2-4**
A study of forces and the effect of forces upon structural members in a state of equilibrium. It is the study of internal stresses and deformations that result when structural members are subjected to external forces through loading. While lectures, and some labs, deal mainly with the theory of force analysis and force systems solutions, laboratory projects involve the application of various stress and strain measuring instruments on many materials used in construction. (Prerequisites: MT 133 and PH 133)

**AR 190 Architectural Engineering Graphics & Materials 4-0-4**
This course focuses on the traditional ways of representing architectural & engineering ideas graphically through the development of sketching. The topics include line techniques, lettering styles, geometric construction, principles of projection and an introduction to structural analysis for foundation loading. The design issues of built environment are studied regarding building planning and siting. The student produces floor plans, foundation plans, site plans, elevations, building sections, wall sections and details. (Corequisite: CAD 101)

**AR 191 Architectural Desktop 3-0-3**
This course is designed for architects and other building professionals. Participants begin with a conceptual massing model and work in 2D or 3D or both at the same time to create a design and draft construction documents. ADT is built on traditional drawing tools of AutoCAD allowing students to create a building model with intelligent architectural objects that behave according to real-world properties. Advanced layer grouping and symbol management will be used to perform scheduling and documentation of the final project. Because all drawings derive from a single data set, they are perfectly coordinated and automatically updated throughout the entire design process. *Note: students are expected to be able to read and interpret architectural/engineering graphics to register for this course.*

**AR 192 Revit 3-0-3**
Autodesk® Revit®, a parametric building modeler based on parametric technology, enables the user to make a change anywhere in the building project and it's automatically dated everywhere else in the project. The course focuses on building a foundation for the basic elements in the software. *Note: students are expected to be able to read and interpret architectural/engineering graphics to register for this course.*

**AR 193 3D Viz 3-0-3**
This introductory course covers the concepts needed to work with 3D Studio Viz like the user interface, modeling concepts, scene creation, object creation, material creation, and mapping. After creating solid models, surfaces, lights, and materials, the focus will then be on rendered animations. Knowledge of 3D modeling concepts and familiarity with 2D AutoCAD is expected. (Prerequisites: AR 101 or permission of the department head of Architectural Engineering Technology)

**AR 194 Microstation 3-0-3**
This is an introductory course in Computer-Aided Drafting (CAD) for beginning students using Microstation V8 software. Topics include drawing set-up, line drawing, text placement, basic editing and dimensions. The course structure focuses on the most common basic functions necessary to complete drawings including move, mirror, copy, offset, distance and more. Projects incorporate basic techniques of drawing and computer-aiding drafting. *Note: students are expected to be able to read and interpret architectural/engineering graphics to register for this course.*

**AR 202 Architectural Design Studio II 2-2-3**
Emphasis is placed on an architectural design solution for a multi-story addition to existing buildings and preparation of construction documents for an institutional building. The student will study a multi-story steel framed and masonry enclosed structure. Floor plans, elevations, sections and details using materials typically used in construction today are sketched to scale and produced by computer aided drawing (CADD) using AutoCAD Architectural Desktop software. Lectures relating to the basics of circulation, egress requirements, structural steel framing, masonry, codes, metal pan stairs, barrier-free design and handicap code requirements, fire protection, acoustics, glazing, curtain-wall systems, roofing and building energy conservation supplement studio work. (Prerequisites: AR 103 and AR 104; corequisite: CV 240) ***Note:*** *course not required of students in Civil Engineering Technology option.*

**AR 250 Environmental Systems 3-0-3**
A survey of the environmental control methods and support systems used in contemporary buildings. Emphasis is on the fundamentals of each system and design of simple systems, and how they relate to energy utilization and conservation in building design. Economic comparisons and cost/benefit ratios are also studied. (Prerequisite: PH 135) ***Note:*** *course not required of students in Civil Engineering Technology option.*

**AR 270 Construction Management 3-0-3**
A course dealing with the business phase of a construction project, from working drawings and specifications to final completion of the structure. Both the architect's or engineer's role and contractor's role in coordinating project activities are discussed. Also covered are cost control (estimating) and contractual arrangements, including recent innovations of the industry. Guest lectures and a field trip to an ongoing construction project will supplement classroom lectures. (Prerequisite: AR 202 and EN 125)

**AR 297 Architectural Design Studio III 2-2-3**
The student chooses a project for the term to design from a collection of instructor-approved projects requiring real site considerations. By discussing the relevant design criteria with the instructor and selection of a hypothetical client outside of class, the student develops and refines the program of space requirements and acquires an appreciation of the in-depth functionality of architecture, especially space adjacency requirements. The study includes an analysis of a site, structure, codes, circulation, material usage and energy considerations. Schematic and preliminary designs, with an emphasis on sketching for study purposes, presentations drawings and construction documents are produced by CADD using 3D Architectural Desktop software. Students build a study and final model, and are required to submit a progress report. An emphasis is placed on a thorough coordination of the work, application of current technology and application of the knowledge gained in the AET program. (Prerequisites: AR 202, AR 220, CV 240 and EN 125)

## Biology

**BI 100 Introduction to Biology with Laboratory 3-2-4**
An introductory course in biology intended to satisfy the biology admission requirement for NHTI health-related degree and diploma programs. Topics include scientific method and measurement, cell structure and function, energy transformation, nutrient processing, gas exchange, circulatory systems, nervous systems, principles of homeostasis, and heredity. Laboratory exercises parallel lecture topics, and include microscopy, dissection, biochemistry, and physiological experimentation. *(for institutional credit only; does not count toward graduation requirements but is calculated into GPA; not intended for transfer)*

**BI 107 Integrated Biological Science 5-0-5**
This introductory course will cover the essentials of human anatomy, physiology and microbiology. Topics include basic cell physiology, histology, and anatomy and physiology of the following systems: integumentary, skeletal, muscular, nervous and sensory, circulatory, respiratory, immune, digestive, endocrine, renal, and reproductive. Acid-base balance and fluid and electrolyte balance will be addressed. Basic microbiology will cover fundamental facts and principles of classification, morphology, cytology, physiology, and nutrition along with health-related effects, and

control measures of the major groups of microorganisms. *This course is spread over two semesters and is intended for students in the Practical Nursing program; 5 credits will be earned only upon successful completion of both parts of the course.* (Prerequisite: high school level biology with lab with a grade of "C" or higher.)

**BI 111 General Biology I 3-2-4**
Designed to provide the student with the basic principles of biology, including scientific method, cell structure, cellular biochemistry and energy transformations, and genetics. Laboratories are used to develop skills in scientific thought and common procedures used in biological experimentation. With BI 112, intended to provide a foundation for further study in life sciences. (Prerequisites: algebra I; high school level biology and chemistry, with labs)

**BI 112 General Biology II 3-2-4**
A continuation of BI 111. Includes a survey of the taxonomic groupings of life forms, as well as the principles of evolution and ecology. (Prerequisites: algebra I; high school level biology and chemistry, with labs)

**BI 115 Introduction to Ecology 3-2-4**
This course is designed to give non-science majors an opportunity to learn about the interactions between the physical and biological components of the environment. The lecture will provide a broad introduction to the organismal, population, community and ecosystem levels of ecological interaction. Instructional methods include readings, lecture/discussion, in-class applications, field observations and field research. The lab portion of this course will provide students with practical experience in ecological methods and in the design, conduct and analysis of ecological studies. Laboratory exercises are designed to correspond with major lecture topics. Exercises include laboratory and field studies; students should come prepared to be outside for most labs.

**BI 120 Human Biology 3-4-4**
A brief summary of human anatomical structure and physiological systems designed to provide students with the knowledge and perspective necessary to work in their chosen fields.

**BI 122 Basic Pathophysiology 3-0-3**
A course designed to provide the student with an understanding of the various mechanisms by which human diseases develop. Includes a survey of common disorders involving each of the major body systems. (Prerequisite: BI 120 or permission of department head of Chemistry and Biological Sciences.)

**BI 123 The Biology of Human Reproduction 3-0-3**
This is an introductory course intended to give an appreciation for the importance of the following areas of reproduction: male and female anatomy and development, sexual differentiation, puberty, menstruation, parturition, lactation, assisted reproductive technologies, birth control methods, and menopause. (Recommended: high school level (or higher) biology)

**BI 125 Human Genetics and Society 3-2-4**
This course is an introduction to genetics for students not majoring in the sciences. The student will be introduced to the basic principles of Mendelian and molecular genetics and will apply these principles to human genetic traits. Causes and treatments of common inherited diseases will be discussed as well as genetic technologies and their applications (recombinant DNA technology, genetic engineering, *in vitro* fertilization). The associated ethical and social issues will also be examined. Lab component to complement lecture. (Recommended: high school level (or higher) biology)

**BI 159 Personal Nutrition 3-2-4**
An introductory course including laboratory for the individual interested in nutrition as a tool for personal health promotion and disease prevention. Incorporates basic principles of nutrition with discussions of contemporary issues. Laboratory exercises allow for exploration of lecture topics and will include scientific method, food analysis, diet analysis and nutritional lifestyle analysis.

**BI 195 Anatomy and Physiology I 3-2-4**
An introduction to the structure and function of the human body. Includes elementary cytophysiology, histology, and anatomy and physiology of the integumentary system, skeletal system, muscular system, nervous system, and special senses. Laboratory work parallels lecture topics, and includes microscopy, study of human anatomical models, dissection of preserved animals, and physiological experimentation. (Prerequisite: high school biology with lab and high school chemistry with lab, each with a grade of "C"or higher, or permission of the Department Head of Chemistry and Biological Sciences)

**BI 196 Anatomy and Physiology II 3-2-4**
A continuation of BI 195. Includes anatomy and physiology of the endocrine system, circulatory system, immune system, respiratory system, digestive system, excretory system, and reproductive system. Other topics covered include nutrition and metabolism, acid/base balance, fluid and electrolyte balance, and genetics. Laboratory work parallels lecture topics, and include microscopy, study of human anatomical models, dissection of preserved animals, and physiological experimentation. (Prerequisite: BI 195 or permission of department head of Chemistry and Biological Sciences)

**BI 202 Microbiology 3-3-4**
Lectures focus on three major areas: 1) basic concepts of microbiology, including morphology and physiology of prokaryotes, eukaryotes, and viruses; 2) host resistance to disease and immunology; and 3) epidemiology of selected diseases caused by bacteria, viruses, fungi, protozoa, and parasitic worms. Labs also focus on three major areas: 1) basic skills such as staining, microscopy, and isolation techniques; 2) bacterial physiology as is pertinent to identification of bacterial species; and 3) control of microorganisms via chemotherapeutic agents, physical means and chemical disinfectants. (Prerequisite: BI 196)

**BI 211 Genetics 3-2-4**
A lab course intended to enhance a student's knowledge of basic genetics and to provide the foundation necessary for further studies in molecular biology, cell biology, evolution, systematics, and behavior. Topics covered will include Mendelian genetics, molecular genetics, immunogenics, genetics of cancer and population genetics. (Prerequisites: BI 111, or BI 195, or BI 202, and MT 123 or equivalent; or permission of department head of Chemistry & Biological Sciences)

**BI 212 Ecology 3-2-4**
Investigations into the biological and physical factors affecting the distribution, abundance, and adaptations of organisms. Interrelationships at the population, community, and ecosystem levels will be studied. (Prerequisites: BI 111, BI 112 and MT 123; MT 251 recommended; or permission of department head of Chemistry and Biological Sciences)

**BI 222 Pathophysiology 3-0-3**
A course that provides the allied health student with an understanding of disease processes by building on the student's knowledge of normal anatomy and physiology. Common disorders of major body systems are discussed relative to the mechanisms by which they develop and their effects on homeostasis. (Prerequisite: BI 196 or permission of department head of Chemistry and Biological Sciences)

**BI 259 Normal and Therapeutic Nutrition 4-0-4**
An introductory course in normal and therapeutic nutrition designed for students in allied health programs. Focuses on the application of basic principles of nutrition to health promotion and disease prevention, as well as the role of nutritional intervention as a therapeutic tool in specific pathologies. Includes discussion of contemporary issues in nutrition. (Prerequisites: BI 159 or BI 196, or permission of department head of Chemistry and Biological Sciences.)

**BI 279 Life Cycle Nutrition** **3-0-3**
Focuses on nutritional needs of the growing, developing human from conception to old age, with particular emphasis on the nutritional needs of infants, children, adolescents, adults, women and aging adults. (Prerequisite: BI 259 or permission of department head of Chemistry and Biological Sciences.)

## Broadband Networking & Communications Technology

*In addition to listed prerequisites, students must earn grades of "C-" or higher in each course to progress in the program.*

**BN 101 Introduction to Broadband Technology** **3-0-3**
The course examines the next generation wireless mobile technologies capable of carrying vast amounts of high-speed data and video traffic. It also discusses basic cellular technologies and technological advances enabling one-third of the world's population to afford and own mobile phones. Profiles of industry sectors including cable TV providers, incumbent telephone companies, wireless carriers, Voice over IP carriers, and competitive local exchange carriers are presented. Strategies that carriers deploy to gain a competitive edge and the network technologies used to further these strategies are also explored. In addition to looking at the architecture of wireless networks, the course depicts networks based on Internet protocol (IP) as well as traditional circuit switched and signaling systems that tie networks together and link applications to users. It also explores how IP networks are connected to other carriers' IP networks and to public switched telephone networks. The intended audience includes students in the telecommunications field, regulatory staff, salespeople, attorneys, researchers, marketing personnel, human resources professionals, project managers, instructors, telecommunications managers, and high-level administrators.

**BN 102 RF Signal Analysis** **3-3-4**
A continuation course in Electric Circuits with emphasis in AC circuit analysis, filters and resonance. This course covers sinusoidal and non-sinusoidal circuit analysis, including maximum power transfer. Emphasis is on the concepts of resonance, decibels, filters and effect of filters on signals, harmonic and phase distortion, as well as Bode Plots, and pulse waveforms. Additional topics covered are Fourier series and signal analysis, Fourier Transforms, non-deterministic signals, system response to non-sinusoidal inputs and system analysis. Laboratory experiments are designed to reinforce the classroom work. (Prerequisites: EL 101, EL 115, EN 101 and MT 133; or permission of department head of Broadband Networking & Communications Technology)

**BN 110 Instrumentation Laboratory** **1-4-3**
A combination of theoretical background and practical hands-on experience in the operations of measuring and testing devices. Included in this course is, but not limited to, the operation and measurements using spectrum analyzers and spectrum analysis, oscilloscopes, RF signal level meters, RF sweep and balance, sweep transmitters and receivers, time domain reflectometers, optical level meters and laser sources, and video signal analyzers. Practical experiments with connectors and splicing, amplifier installation and activation, grounding and bonding are also included. (Prerequisites: BN 101 and MT 133 or permission of the Department Head of Broadband Networking & Communications Technology)

**BN 201 Fiber Optics and Transmission Lines** **3-3-4**
This course will focus on the fundamentals of fiber optics and transmission lines. Topics range from fundamentals of fiber optics, optical modes and wavelengths, to properties of fibers, light sources, transmitters, receivers and applications of fiber optics in global and local area networks. Transmission lines are also examined with topics ranging from EM and TM field radiation, wave propagation through various media, RF power ratios, voltage gain, reflection, refraction, VSWR, impedance matching, polarizations, and frequency allocations. Microwave, satellite and antenna transmissions are also examined. In addition, amplifier spacing, gain vs. loss, coaxial cable and fiber characteristic, system powering, additive noise, channel loading, non-linear distortion, carrier-to-noise ratios, frequency response, and performance testing are covered. (Prerequesite: BN 101, BN 102 and EL 110 or permission of the Department Head of Broadband Networking & Communications Technology)

**BN 206 Analog and Digital Communication Systems** **3-3-4**
An in-depth study of the transmission of voice, video and data. Included are several analog and digital modulation methods and techniques such as, but not limited to, AM, FM, PM, FSK, PSK, QPSK, PCM, TDM, FDM, QAM, WDM, and DWDM. Topics also include circuit switching, ATM, Frame Relay and SONET networks, congestion control in data networks, ISDN and Broadband applications. The available hardware, effectiveness, capacity, advantages and disadvantages of each system are explored. (Prerequisites: EL 115, MT 133; corequisite: BN 201 or permission of department head of Broadband Networking & Communications Technology)

**BN 240 Data and Internet Communications** **3-3-4**
This course provides the student knowledge and skills in a wide range of topics covering data communications, packet transmission, the internet and Linux OS. Data communications subtopics include transmission media, serial communications, error detection/correction schemes, data security and signal processing required for long distance communications. Packet transmission subtopics include local area networks, hardware addressing, LAN building blocks and wide area networks. Internetworking subtopics include TCP/IP communication stack, ISO 7-layer communication stack, network addressing, internet protocol (IP), address resolution protocol (ARP), internet control message protocol (ICMP), IP routing protocols (RIP, OSPF, BGP), transport control protocol (TCP), user datagram protocol (UDP), and client-server APIs. (Prerequisite: BN 201 and EL 110 or permission of the Department Head of Broadband Networking & Communications Technology)

**BN 306 Senior Project** **1-5-3**
This is a guided study course in which students conduct research into current technologies. Students will involve themselves in the design, development and implementation of curriculum-related aspects of broadband engineering as it applies to current and emerging operating practices. Students are required to present an oral and written description of their projects. All work is to be documented in a logbook and regular progress will be routinely reviewed with the instructor. A technical report and formal presentation of the results are required at project completion. (Prerequisite: EL 210; corequisites: BN 206 and BN 240; or permission of department head of Broadband Networking & Communications Technology)

**BN 307 Broadband Internship** **1-6-3**
Students participate in an internship position with a company in the BNCT area. Students will involve themselves in the design, development and/or implementation of curriculum-related aspects of broadband technology as it applies to current and emerging operating practices. Students are required to present an oral and written description of their internship experience. All work is to be documented in a logbook and regular progress will be routinely reviewed with the instructor. A technical report and formal presentation of the results are required at project completion. (Prerequisites: BN 201 and EL 210; corequisites: BN 206 and 240; or permission of department head of Broadband Networking & Communications Technology)

## Business Administration

**BU 101 Introduction to Business** **3-0-3**
An introduction to the general concepts of business, including organization, forms of ownership, finance, management, marketing, production and the relationship between business and society. The current business

climate and attitudes will also be examined through the use of business publications and articles.

**BU 120 Principles of Banking** **3-0-3**
A descriptive course presenting the fundamentals of banking functions. Topics include banks and the monetary system, negotiable instruments, the relationship of the commercial bank to its depositors, types of bank accounts, the deposit function, the payments function, bank loans and investments, other banking services, bank accounting and marketing, external and internal controls, and the public service obligations of banks.

**BU 121 Money and Banking** **3-0-3**
This course presents the practical application of the economics of money and banking to the individual bank. Coverage is given to the structure of the commercial banking system, the nature and functions of money, banks and the money supply, cash assets and liquidity management, bank investments, loans, earnings, and capital, the Federal Reserve System and its policies and operations, Treasury Department operations and the changing national monetary system.

**BU 150 Supervision** **3-0-3**
In this course, students learn to analyze issues, solve problems, and build management skills realizing that regardless of the technical specialties that may exist in business, there are managerial aspects which are common to every supervisory position. Topics include contemporary issues such as managing in a nondiscriminatory way, building positive discipline, motivating line workers, and ethics in supervision.

**BU 170 Principles of Marketing** **3-0-3**
An introductory course presenting such topics as the seven managerial functions of marketing, problem-solving, decision-making, marketing research, ethics in marketing, new product development, price determination, marketing channels and advertising.

**BU 174 Principles of Sales** **3-0-3**
A study of the selling process as it relates to training professional sales people and the basic elements of the persuasion process. A systematic approach will be used to develop techniques to adjust to individual styles. Students will also study the tasks of the sales manager and techniques which are used to hire, train, and compensate the sales force. (Prerequisite: BU 170)

**BU 180 Principles of Retailing** **3-0-3**
This course provides the basis for understanding the world of retailing. Topics include retail strategy, store location, buying merchandise, assortment planning, inventory management, retailing, customer service and store layout. (Prerequisite: BU 170)

**BU 220 Entrepreneurship** **3-0-3**
The course provides an overview of the excitement and challenges of starting a new venture. It examines the issues of developing a new venture and the concerns in managing the venture once it becomes operational. The course will help the new entrepreneur explore the environment for new opportunities; help the new entrepreneur match her/his skills with new opportunities; and examine the viability of the new venture and the possibilities of financing. Finally, a series of cases will be examined that illustrate why some new ventures become successful and why some do not. (Prerequisite: BU 170)

**BU 221 Health Care Management in the U.S.** **3-0-3**
This course will examine health care trends within the United States. The focus will be on the evolving nature of health care and current debates. Students will explore such topics as: history of health care, hospital reorganization, care delivery settings, administrative and caregiver role changes, reimbursement, managed care and governmental interventions.

**BU 225 Business Law I** **3-0-3**
Law I is the study of the fundamental principles of law as they apply in the business world. The course examines legal rights and remedies and contracts. Students will gain a detailed understanding of the law of Torts and Contracts, and will learn business law through related textbook readings and research on the Internet. This course emphasizes the relationship of business law to an individual's personal life as well as occupational life. Applications of the laws as they affect the individual in a moral society are featured.

**BU 226 Business Law II** **3-0-3**
Focuses on various forms of legal entities and Articles 2 and 9 of the UCC. The major laws governing securities, entities, antitrust, bankruptcy, and environmental issues are reviewed. Special emphasis is given to the legal liability of the professional. This course is designed for the future business manager, entrepreneur, or professional who wishes to have information regarding laws governing business. (Prerequisite: BU 225)

**BU 240 Small Business Management** **3-0-3**
This course is designed for the student who is primarily interested in the ownership and management of the small business enterprise. It examines and analyzes the managerial functions of planning, organizing, staffing, direction, and controlling as applied to the small business. Students also study retailing, wholesaling, manufacturing, and service type business organizations. (Prerequisite: AC 101 or BU 101)

**BU 242 Business Ethics** **3-0-3**
An introductory study of classical and contemporary ethical philosophies and how these philosophies apply to current business practices. The course stresses analytical and problem solving skills to comprehend the ethical dimensions of business relationships: employer and employee; managers to owners; manufacturers to consumers; and corporations to the environment. *This course does not meet the requirement for PI 242 Ethics or any other humanities elective.* (Prerequisite: BU 101 or permission of Department Head of Business Administration)

**BU 245 Organizational Behavior** **3-0-3**
This course helps students to develop a more complete understanding of the distinctively human dimensions of management. Emphasis is placed upon the allocation of theory to real world problems as well as the development of interpersonal skills. Topics include such issues as motivation, leadership, group dynamics, and interpersonal communication. (Prerequisite: BU 270 strongly recommended or permission of department head of Business Administration)

**BU 250 Principles of Finance** **3-0-3**
A study of the planning and control involved in financial statement analysis, working capital management, cash budgets, cash flows, and breakeven analysis within a corporate environment. (Prerequisite: AC 102)

**BU 255 Personal Financial Planning** **3-0-3**
Provides an effective learning experience in personal finance. Emphasis in on helping students make sound financial decisions in the areas of budgeting, insurance, taxes, credit, investment, real estate, and retirement planning. (Prerequisite: AC 101 or BU 101)

**BU 257 Investments** **3-0-3**
This course introduces students to the world of investments, including various types of investment vehicles, techniques, and strategies. Students will study the investment environment, role and scope of investments, risk and return, and types of investment markets and transactions. Traditional short- and long-term investment instruments will be analyzed; higher-risk, more complex investments will also be reviewed. (Prerequisite: AC 102; BU 250 strongly recommended)

**BU 261 Advertising** **3-0-3**
This course provides a thorough introduction to many aspects of advertising. Discussion includes how advertising is created, the media in which it appears, and the laws and ethics governing advertising professionals. Careers in advertising are also discussed. (Prerequisite: BU 170)

**BU 262 Consumer Behavior** **3-0-3**
In this course, students concentrate on the ultimate or final user, examining anticipatory and consummatory, rational and emotional, instinctive and collectivist behavioral variables in the light of conceptual contributions from economics, psychology, sociology, and anthropology. (Prerequisite: BU 170)

**BU 265 Marketing Research** **4-0-4**
In this course, students learn to develop the information necessary for marketing decision-making. The course emphasizes a management-oriented analysis of marketing phenomena including the following: identifying and defining marketing problems; designing research; acquiring information; evaluating data; and presenting research in a professional and ethical manner. The purpose of this course is three-fold: 1) to familiarize the student with the commonly used techniques in the collection and analysis of marketing research information; 2) to have the student gain perspective and practice in applying these techniques and report findings through a research project; and 3) to develop an understanding of decision-making in marketing, its inherent difficulties and pitfalls and the importance of information in marketing research. (Prerequisite: BU 170)

**BU 270 Principles of Management** **4-0-4**
The course provides an understanding and appreciation of organizational structures and the role of the manager within these structures, with emphasis on the influence of the social sciences upon current management theory. (BU 150 recommended prior to taking BU 270)

**BU 273 Human Resource Management** **4-0-4**
A study of human resource management including the evolution of the personnel process, organizational models, leadership patterns, and issues touching upon planning, assessment, staffing, training, development, and environmental issues. Emphasis is placed on the application of theory and practice so that students will gain a useful understanding of human resource management whether they seek careers in that field or in other disciplines. (BU 150 or BU 270 recommended prior to taking BU 273)

**BU 275 Labor-Management Relations** **3-0-3**
The development of unions, collective bargaining, labor legislation, the main issues confronting labor and management (e.g. OSHA, pension plans, rights of public employees and productivity) constitutes the initial part of the course. The practical aspects of the course are covered through an intensive study of the negotiation, grievance procedure, arbitration, conflict resolution and behavioral aspects of union and management. The course includes cases in which students must prepare and, where possible, role play collective bargaining and union-management positions. (Prerequisite: BU 273 strongly recommended)

**BU 280 Marketing Management** **3-0-3**
This course enhances student knowledge and skill in specialized topic areas, including new product development, direct marketing, media selection, copy creation, advanced marketing, research techniques, sales communication and interaction. All students write in-depth research reports. (Prerequisite: BU 170; Senior standing required)

**BU 290 Management Internship** **0-9-3**
Students in this course engage in individually supervised employment within an area of management requiring applications of management theory and principles to the work environment. Students must work at least ten hours per week on the job, meet periodically with a supervising faculty member, research related literature in the employment field, and prepare a substantive report on the work experience and the studies involved. This course is limited to seniors and requires the approval of a supervising faculty member and the Department Head. (Prerequisite: 2.8 G.P.A. and approval of department head of Business Administration)

**BU 295 Marketing Internship** **0-9-3**
In this supervised internship, students apply the principles of marketing in a position requiring at least ten hours per week. This course requires a written report and is open to seniors. Students must have the approval of the supervising faculty member and the Department Head. (Prerequisites: 2.8 G.P.A. and approval of department head of Business Administration)

## Chemistry

**CH 100 Introductory Chemistry** **3-2-4**
An introductory course in chemistry intended to satisfy the chemistry admission requirement for NHTI health-related degree and certificate programs. Consideration will be given to fundamental atomic theory, chemical arithmetic, kinetic theory, solution chemistry, acids, bases and salts, and introductory organic chemistry. Lab included. (Proficiency with the mathematical operations of high school algebra I or MT 103 strongly recommended) (*for institutional credit only; does not count toward graduation requirements but is calculated into GPA; not intended for transfer)*

**CH 103 General Chemistry I** **3-2-4**
Fundamental laws and concepts of chemistry, including elements, atomic structure, the periodic table, chemical bonding, compounds, chemical equations, and stoichiometry. Laboratories are used to reinforce concepts presented in lectures and to develop skills in scientific thought and common procedures used in chemical experimentation. With CH 104, intended to provide a foundation for further study in life sciences and physical sciences. (Prerequisites: high school chemistry with lab, algebra, and ability to use exponents and logarithms)

**CH 104 General Chemistry II** **3-2-4**
A continuation of CH 103. Topics include gases and gas laws, solutions, acid-base chemistry, oxidation-reduction reactions, chemical equilibrium and thermodynamics. Also includes an introduction to organic chemistry and biochemistry. Laboratories are used to reinforce concepts presented in lectures and to develop skills in scientific thought and common procedures used in chemical experimentation. (Prerequisite: CH 103 or permission of department head of Chemistry and Biological Sciences)

**CH 105 Chemistry** **3-2-4**
This is an introductory chemistry course in which the fundamental principles of the subject are developed. Included are topics in atomic structure, chemical bonding, periodic table, solutions, reactions, corrosion, and an introduction to organic chemistry. Appropriate laboratory experiments will complement the lectures. (Prerequisite: Algebra I)

**CH 110 Introduction to Biochemistry** **3-2-4**
A course designed to provide allied health students with the basic principles of the chemistry of living processes. Includes the study of macromolecules, metabolic pathways, energy transformations, and enzyme action. (Prerequisite: high school chemistry with lab or permission of department head of Chemistry and Biological Sciences)

**CH 120 Introduction to Forensic Science** **3-2-4**
An introduction to the expanding field of forensic science. This course emphasizes forensic methodologies and the importance of proper collection and handling of specimens to ensure the integrity of evidence collected at crime scenes. Although primarily a chemistry course, aspects of biology, physics, geology and various medical fields will be incorporated into instruction. Lab.

**CH 205 Organic Chemistry** **3-3-4**
An introduction to the nomenclature, structure, and reactions of organic compounds. Lab. (Prerequisites: CH 103 and 104, or CH 105, or permission of department head of Chemistry and Biological Sciences)

## Civil Engineering Technology

**CV 191 Land Desktop** **3-0-3**
This course is an introduction to the use of computer aided drawing and design software (CADD) for the civil engineering discipline. Areas of application of the software within engineering include the use of projects, Prototypes, Point Labeling, and Digital Terrain Modeling. A basic introduction to the elements of roadway design will also be covered, including horizontal and vertical alignments, profiles and cross sections. Laboratory is provided for students to practice these skills with the support of the instructor. (Prerequisite: AR 101 or permission of department head of Architectural Engineering Technology)

**CV 192 Civil Design** **3-0-3**
This course explores how Autodesk Civil Design software works in concert with AutoCAD Land Desktop software. The specific areas covered in this class include an in-depth coverage of the roadway design and site grading tools as well as the tools available to automate the drafting of pipe runs. The access to centralized project data through AutoDesk Land Desktop enables students to effectively utilize the civil engineering add-on for generating drawings for a project. (Prerequisite: CV 191 or permission of department head of Architectural Engineering Technology)

**CV 193 Map/Survey** **3-0-3**
This course introduces students to AutoDesk Map and Survey software. Map offers a varied range of functionality, including powerful drawing management tools, drawing clean-up capabilities, topology creation and analysis, and GIS linking of drawing objects to internal or external databases. AutoDesk Survey provides an interface to field surveying instruments through which field work is downloaded to produce point, symbols and linework in an AutoCAD drawing environment. (Prerequisite: CV 192 or permission of department head of Architectural Engineering Technology)

**CV 201 Civil CAD** **2-2-3**
This course is an introduction to the use of computer aided drawing and design software (CADD) for the civil engineering discipline. Areas of application of the software within engineering include mapping, topography, site development, and subdivision. Within the field of highway design the student applies civil design software to detail roadway alignment and create final drawings of plan, profile and cross section. Laboratory time is typically for the student to generate designs and drawings with the support of the instructor. (Prerequisites: AR 104 and IT 102, or permission of department head of Architectural Engineering Technology)

**CV 220 Surveying** **2-3-3**
A course to familiarize students with the equipment, procedures, and methodology of modern surveying practice. Includes measurement of distance, elevation, angle, and direction "in the field" with both manual and electronic equipment. The methods of topographic, construction, and route surveying are also studied. Lastly, the student is taught to use software programs to aid in data collection, manipulation and map making. (Prerequisite: MT 133)

**CV 235 Reinforced Concrete Design** **2-3-3**
To learn the fundamentals of design and analysis of steel reinforced concrete structures including beams, floor and roof slab systems, columns, foundation footings, and structural walls. Design sketches, based on calculations and in accordance with the latest American Concrete Institute (ACI) Building Code Requirements, are prepared. Also a major laboratory project including designing, building and testing an eight foot long reinforced concrete beam is done by student teams. (Prerequisite: CV 240)

**CV 240 Timber and Steel Design** **3-2-4**
The study of structural steel and timber members that involves the design and analysis of beams with regard to bending, shear, and deflection. Columns are studied with respect to axial and eccentric loading. Miscellaneous structural elements such as beam bearing plates, column base plates, and welded and bolted connections are also designed. The student is taught first to make calculations manually, then with the aid of computer software. The laboratory time ( 2 hours per week ) is dedicated to a variety of activities where the student is fully involved not only in the design and analysis, but also in the construction and testing of timber and steel beams, columns, connections, bracing systems, load packages and simple frames. Finally, the observations and results are documented through calculations, drawings, photos and CADD. (Prerequisite: AR 120 and AR 150)

**CV 297 Highway Design** **3-2-4**
This course focuses on the highway design process, beginning with transportation requirements and soil mechanics and continuing with highway location, site planning, geometric design and pavement design. The knowledge gained equips students for project work. The course culminates with students' preparation (using CADD) and presentation of final engineering drawings of a section of roadway. This project is evaluated with respect to alignment, safety, aesthetic impact, construction cost and professional quality. Labs will involve the use of a soil testing lab and visits to nearby road construction sites will be scheduled. (Prerequisite: CV 220)

## Community Social Service

**CS 111 Community Social Services** **3-0-3**
Provides an introduction to the history of care provided to people with a variety of disabilities and challenges. Presents and describes the principles of community integration and social role valorization, discusses client rights, quality of life, guardianship, and emerging issues in community social services. Presents a model for evaluating the quality of community social services.

**CS 112 Supportive Communication Skills** **3-0-3**
This course introduces the theory and practice of the primary counseling skills and their application in various settings. Extensive role playing activities will be used to teach these interpersonal skills.

**CS 115 Learning and Behavior** **3-0-3**
This course discusses the history and principles of behaviorism and presents a learning theory and teaching techniques based on positive behavioral principles. Presentation and discussion focus on the ethical and client rights issues of positive behavior change, and recent trends and techniques for applying learning principles in a variety of settings. (Prerequisite: CS 111 and PY 105)

**CS 116 Assessment and Individual Planning** **3-0-3**
This course reviews the process for designing and implementing support for human service consumers. Presentation and discussion will include current and evolving models for assessment and planning, as well as the factors that influence achievement of individual plans. (Prerequisites: CS 111, CS 115, PY 105, PY 220)

## Computer Aided Design

**CD 101 CAD I** **1-3-2**
Basic Training in the use of Computer Aided Drawing (CAD) including entity creation, editing, dimensioning, file management, and plotting. A "hands on" approach will be taken while using PC based AutoCAD software. Applications will be taken from a variety of disciplines. *This course does not meet requirements for the MET/MFT programs.*

**CD 102 CAD II** **1-3-2**
A continuation of CD 101 into more advanced concepts in Computer Aided Drawing. Topics include wire frame, surface and solid modeling as

well as techniques to improve productivity. *This course does not meet requirements for MET/MFT programs.* (Prerequisite: CD 101)

**CD 103 CAD III** **1-3-2**
This course is a continuation CD 101 and CD 102. Emphasis is placed on 3-D parametric solid modeling using Autodesk Mechanical Desktop. Student will develop skills and utilize techniques to produce geometric profiles that serve as a database for the production of 3-D models, working drawings, bill of materials and exploded views of assembled models. *This course does not meet requirements for MET/MFT programs.* (Prerequisites: CD 101 and CD 102)

## Computer Engineering Technology

*In addition to listed prerequisites, students must earn grades of "C-" or higher in each course to progress in the program.*

**CP 107 Introduction to Programming with C++** **2-3-3**
Introduces the student to program design using the language C++. No prior knowledge of programming is assumed. Focuses on effective structured design of code with variables, decisions, loops, functions, arrays and introduction of pointers. Use of professional programming design approaches and coding style will be used in laboratory assignments. Completion of this course provides the programming design skills to continue on with the study of the language C++ or other computer languages. *A grade of C- or higher must be achieved to meet the prerequisite criteria for subsequent major field courses.*

**CP 112 Embedded Systems Programming** **3-3-4**
Microprocessor architecture, instruction sets, hardware interfacing and applications are covered with emphasis on machine and assembly language programming. Integrated hardware/software development environments supporting both high-level and assembly language program development are utilized. Laboratory exercises explore microcontroller systems level applications including parallel and serial data transfer, data acquisition, and real-time applications with digital and analog input and output signals. Advanced topics may include an introduction to control and embedded micro-systems applications. (Prerequisites: CP 107, EL 101 and EL 115; corequisite: CP 215; or permission of department head of Computer Engineering Technology)

**CP 215 Integrated Circuits and Interfacing** **3-3-4**
For CPET and other NON-EET majors, this course supplements EL 115 (Digital Fundamentals) with basic linear and interface electronics. Topics covered include simple power supplies, op-amps, stepper motors, A/D & D/A conversion, interfacing a computer bus, parallel and serial ports. Advanced digital topics such as synchronous logic and programmable logic devices will also be covered. The labs demonstrate real world implementation of otherwise abstract academic concepts. Fluency with the use of test equipment and debugging skills will also be stressed in the laboratory environment. (Prerequisites: EL 101 and EL 115 or permission of department head of Computer Engineering Technology)

**CP 222 Data Communications & Internetworking** **3-3-4**
This course provides the student knowledge and skills in a wide range of topics covering data communications, packet transmission and the Internet. Data communications subtopics include transmission media, serial communications, error detection & correction schemes, data security and signal processing required for long distance communications. Packet transmission subtopics include local area networks, hardware addressing, LAN building blocks, and wide area networks. Internetworking subtopics include TCP/IP communication stack, ISO 7-layer communication stack, network addressing, Internet protocol (IP), address resolution protocol (ARP), Internet control message protocol (ICMP), IP routing protocols, transport control protocol (TCP), user datagram protocol (UDP), and client-server API. (Prerequisites: CP 107 and CP 235; corequisites: CP 240, CP 252 recommended; or permission of department head of Computer Engineering Technology)

**CP 235 Algorithms With Object Oriented Programming** **3-3-4**
This course focuses on the development, implementation and analysis of algorithms developed with object oriented design. Object oriented programming (OOP) techniques will be used to solve algorithms such as stacks, queues and linked lists. Concepts such as priority ranked data and object containers as well as circular queues will be covered. Sorting, data manipulation and retrieval will be covered. Languages which support OOP will be used as the learning method. Both C++ and Java will be used. This course covers intermediate and advanced topics with extensive hands on programming. Key OOP foundation capabilities of data abstractions, inheritance and polymorphism will be covered. Topics in C++ specifically covered will be pointers, operator overloading and multiple inheritance. (Prerequisite: CP 107; or permission of department head of Computer Engineering Technology)

**CP 240 Programming for Windows Operating Systems** **3-3-4**
Microsoft.Net Framework programming will be covered from Window Applications to full utilization of the Internet. Microsoft Visual Studio.Net with its intergraded development environment will be studied and utilized. The programming languages will be Visual Basic.Net and C# with emphasis on C#. The course will use programming techniques to understand the functionality of the operating system and the .Net foundation integration with the Internet. Internet usage will involve developing web pages using Web Forms by using ASP.Net. Connection and use of databases will use ADO.Net. Web Services for distributed applications on the Internet will also be covered. Advanced features of the language C# will be reviewed. Experience will be gained using extensive hands-on laboratory assignments. (Prerequisites: CP 107 and CP 235 or permission of department head of Computer Engineering Technology based on having introductory programming skills with languages such as Java, C++ or classic Visual Basic)

**CP 252 Networking and Internet Technologies** **3-3-4**
This course provides the student knowledge and skills in a diverse range of topics including structured query language (SQL), client-server programming, selected internet applications and LAMP (Linux, Apache, MySQL and PHP). SQL subtopics include relational database concepts, the SQL language and relational database design. Client server programming is studied in C++ using socket APIs and Java using socket classes. Selected internet applications include domain name system (DNS), hypertext transfer protocol (HTTP) and file transfer protocol (FTP). LAMP topics include a Linux overview, Apache web server configuration, dynamic web pages using PHP and MySQL relational database. Each student is also required to define, implement, demonstrate and present a networking project during the last several weeks of the course. (Prerequisites: CP 107 and CP 235 or permission of department head of Computer Engineering Technology)

**CP 260 Computer Real Time Interfacing** **3-3-4**
Interfacing computers to the outside world is the focus of this course. Computers are commonly used to gather data and to control processes such as medical equipment, research projects and manufacturing. The course content focuses on practical real time (fast response) and multithreaded programming techniques used in interfacing of computer inputs and outputs. The course is divided into two major parts. First, a programmable logic controller industrial computer using the language relay ladder logic (Boolean algebra based) is used to teach the fundamentals of real time control. The second part uses multithreading programming techniques using optionally Java or C#. Animation concepts are used to augment the multithreaded aspects, both 2D and 3D. The final project is presented in class. (Prerequisite: CP 107; corequisite: CP 235; or permission of department head of Computer Engineering Technology based on introductory knowledge of C++ or Java)

**CP 301 Computer Project Definition** **1-0-1**
Students will elect this course as a first phase to Computer Project CP 303. During this course a student selects a project which is either provided by an industrial sponsor or chosen by the student. The selections are made with the guidance and approval of the instructor. The student will

meet with the sponsor to initiate the project and then will write a specification to define the project. (Prerequisite: CP 107 and Corequisites: CP 235 and CP 260; or permission of department head of Computer Engineering Technology)

**CP 303 Computer Project** **1-4-3**
The student will complete the project defined in CP 301 while maintaining logbook documentation, providing the advisor with progress reports. In addition, a formal oral presentation describing the project and a demonstration is required. (Prerequisites: CP 301 during the preceding semester, CP 107, CP 235 and CP 260; or permission of the department head of Computer Engineering Technology. Strongly recommend having previously taken or to be concurrently taking CP 222, CP 240 and CP 252.)

## Criminal Justice

**CJ 101 Introduction to Criminal Justice** **3-0-3**
This course presents the history, development and current status of the criminal justice system in the United States, and the challenges it faces. When appropriate, the opportunity is taken to visit relevant agencies.

**CJ 121 Criminal Procedure** **4-0-4**
This course analyzes the constitutional issues in the United States which have direct bearing on the role and policies of criminal justice agencies. Application of these issues as they relate to investigation, arrest, pre-trial and appeal will be emphasized. The course is a combination of the case law and lecture method.

**CJ 123 Criminal Law** **4-0-4**
This course combines an examination of the general principles of criminal liability and excuse therefrom with a review of the substantive law of crimes in the United States. The course uses a combination of the Socratic/case law and lecture approach.

**CJ 150 Criminology** **3-0-3**
This course is a detailed analysis of the development of criminological theory, embracing the contributing disciplines of biology, psychology, sociology, political science and integrated theory combining those disciplines. Attention is also paid to the offender/victim relationship.

**CJ 205 Police Administration and Operations** **3-0-3**
This course covers the principles of police organization, administration, along with community policing, as well as the selection, training, promotion and socialization of officers. It deals with the conflicting roles that the police and individual officers face in today's society as part of the justice system. It also examines issues involving the influence of research, police deviance, minorities, the use of force, and the general hazards of police work.

**CJ 210 Juvenile Justice Administration** **3-0-3**
Theories, causation and prevention programs are studied. Rehabilitative theories and treatment programs of public institutions and public and private agencies are included. Case studies are made available to the student for analysis. Adolescent behavior, peer pressure, and the role of the family will be examined.

**CJ 215 Corrections Operations** **3-0-3**
This course is a study of correctional processes and services, standards, personnel and principles of management; allocation of resources, training and staffing; the role of sentencing and work release programs; special programs and the use of outside contracts.

**CJ 225 Drug Abuse and the Law** **3-0-3**
In the first part of this course, the historical use of the major drug groups (including alcohol) will be reviewed. In the second part, the reaction of the criminal justice system to illegal involvement with drugs and alcohol and methods of treating substance abusers will be reviewed.

**CJ 227 Victimology** **3-0-3**
This course examines those issues in the criminal justice system which directly pertain to the system's interaction with victims. It examines how people become victims, and how the criminal justice system and related agencies deal with these people once that victim status is identified.

**CJ 230 Justice and the Community** **3-0-3**
This course deals with the interaction of the various components of the justice system with the community. It involves an analysis of the way the work of police departments, courts, correctional institutions and community corrections agencies appear to the public. The image of the justice system in the media is examined: specific attention is paid to the issues of the young, minorities and community organizations.

**CJ 270 Internship** **0-9-3**
The internship offers the student the opportunity to put learned theory to practical application. The student is responsible for seeking out the agency placement, with the assistance of the course instructor. The internship requires the completion of a mandatory minimum number of hours. A log is kept, and the final grade is based on a combination of the log, supervising agency assessment, and final analytical report.

**CJ 275 Senior Project** **3-0-3**
In this course, through on-going and individualized contact with the supervising instructor, the student develops a topic pre-approved through a prospectus presented to the instructor. The student may develop any topic raised in any major class and is not limited by category. Empirical studies, surveys, literature reviews are among the acceptable categories of research. The final grade is determined by a review of the final product and the extent to which the student has followed the course guidelines.

## Allied Dental Education

**DN 100 Dental Hygiene I** **2-0-2**
An introduction to the theories and principles of the delivery of dental hygiene care, including evaluation of the patient, professional and clinical services. Emphasis will be placed on current concepts in preventive dentistry.

**DN 103 Dental Hygiene II** **2-0-2**
An introduction to common systemic diseases with emphasis on dental hygiene treatment planning and management of medical and dental emergencies. Topics discussed during seminar include substance abuse, stress, occupational and environmental hazards and special needs patients. (Prerequisites: BI 195, DN 100, DN 113 and DN 134)

**DN 105 Dental Radiology for Dental Assisting** **2-3-3**
Lectures and demonstrations are coordinated with laboratory practice on mannequins to develop mastery of dental radiographic techniques to include digital radiography, processing, mounting and evaluating films. Emphasis will be placed on client and operator protection, exposure and processing errors, asepsis protocol, radiographic techniques and equipment function. Two clients will be scheduled near the end of the term when students exhibit acceptable and safe skills.

**DN 110 Dental Assisting Science I** **3-0-3**
A study of the anatomy of the head, emphasizing the osteological landmarks and the structures of the oral cavity. Both the permanent and primary dentitions are studied, including embryonic development and eruption patterns. In addition, an introduction to the structure and function of the human body systems in health and disease will be presented.

**DN 111 Dental Assisting Science II** **2-0-2**
An introductory study of drugs with specific consideration of those used in dentistry. Emphasis on drug origin, properties, dosages and therapeutic effects. Studies in oral pathology will include signs and symptoms of the

diseases common to the oral cavity to include neoplastic disease and the inflammatory response. (Prerequisite: DN 110)

**DN 113 Clinical Dental Hygiene I 1-8-3**
A pre-clinical course for the development and application of information relating to preventive dental hygiene services. Includes topics on asepsis, infection control, gathering and evaluating patient medical and dental histories, legal and ethical considerations, body mechanics, intra and extra oral exams, and instrumentation. Use of adjunct dental hygiene aids is also taught. Skills will be practiced on student partners. A classroom seminar for learning activities and group discussion is included.

**DN 114 Clinical Dental Hygiene II 1-8-3**
Clinical Dental Hygiene II is a continuation of Clinical Dental Hygiene I. Students will apply techniques learned in Clinical Dental Hygiene I directly on clinical patients. Emphasis is placed on the introduction of additional dental hygiene instruments, as well as dental health education techniques. A classroom seminar for learning activities and group discussion is included. (Prerequisites: DN 100, DN 113, and DN 134).

**DN 126 Nutrition 2-0-2**
Essentials of adequate diet, vitamin and nutritional balances/imbalances, emphasizing total body health and dental care are discussed. Emphasis is placed on oral manifestations of nutritional diseases, dietary analysis and counseling for the prevention of cavities and periodontal disease.

**DN 134 Oral Anatomy I 2-1-2**
A detailed study of the anatomy of the deciduous and permanent dentitions. Also included is tooth eruption and basic dental terminology. This course includes laboratory sessions which are coordinated with lectures to provide practical applications of dental anatomy.

**DN 136 Oral Anatomy II 2-0-2**
A detailed study of the embryonic development and anatomy of the hard and soft tissues of the face and oral cavity. Study of the anatomical structure of the head and neck with emphasis on the cranial nerves, muscles of mastication and facial expression, temporomandibular joint, vascular and lymphatic systems, tooth development and histology of dental tissues and supporting structures. (Prerequisites: BI 195, DN 113, and DN 134)

**DN 140 Dental Radiology for Dental Hygiene 2-3-3**
Lectures and demonstrations are coordinated with laboratory practice on mannequins to develop mastery of dental radiographic techniques as well as processing, mounting and evaluating films. Other topics include the principles of digital radiography, radiographic interpretation, radiographic landmarks and localization techniques. Emphasis will be placed on patient and operator protection and equipment function. Patients will be scheduled near the end of the term when students exhibit acceptable skills. (Prerequisites: DN 100 and DN 134; corequisites: DN 136 and DN 114)

**DN 155 Oral Hygiene Education/Nutrition 2-0-2**
Methods of preventive oral hygiene education, including patient motivation, will be discussed. Lectures in nutrition will stress the importance of good eating habits in maintaining optimal general and dental health. Emphasis will be given to the essential role of the dental assistant in counseling the patient in these disciplines. (Prerequisite: DN 110)

**DN 161 Dental Materials—DA 2-3-3**
Study of the composition and properties of materials used in dentistry. Laboratory sessions emphasize practice in manipulation of various materials.

**DN 162 Dental Materials—DH 2-3-3**
An introduction to the composition and properties of dental materials with emphasis on materials currently utilized in dental and dental hygiene treatments. Laboratory sessions are coordinated with lectures to provide practice on manipulation of materials with emphasis on impression taking and preparation of study casts. (Prerequisites: DN 100, DN 113, DN 134, CH 110 or permission of department head of Allied Dental Education)

**DN 175 Dental Assisting Theory I 2-0-2**
A course designed to teach the dental assisting student clinical techniques. Includes information on sterilization and disinfection techniques, charting, and the use of dental equipment and instruments. Students are introduced to four-handed chairside assisting as it pertains to all types of dental procedures including oral evacuation, instrument transfer, tray setups, and completing dental clinical records. Emphasis is placed on the dental health team concept. Ethics and jurisprudence will also be discussed.

**DN 182 Office Procedures and Management with Computer Applications 1-0-1**
Development of working knowledge of office procedures to include telephone techniques, appointment scheduling and filing systems. Lectures will include fundamentals of bookkeeping systems, prepaid dental care plans, payroll and inventory control. Information from lecture topics will be integrated into Dental Assisting Theory II with the use of specialized office management software. (Prerequisite: DN 110)

**DN 191 Dental Assisting Clinical Experience I 0-4-1**
Clinic sessions are coordinated with lectures in preclinical theory. Demonstration and practice of all procedures in simulated clinical situations.

**DN 196 Dental Assisting Clinical Experience II 0-15-5**
Experience in a dental office performing chair-side assisting, laboratory procedures, office procedures, and exposing, processing and mounting radiographs. (Prerequisites: DN 105, DN 110, DN 161, DN 175 and DN 191)

**DN 201 Dental Hygiene III 2-1-2**
Lectures in periodontology with emphasis on the hygienist's role in detection and treatment of periodontal disease. Techniques of patient evaluation, instrumentation and prevention are taught in lecture and implemented in the laboratory/clinic situation. (Prerequisites: DN 103, DN 114, DN 136, and DN 140)

**DN 212 Clinical Dental Hygiene III 1-12-4**
Practical application of dental hygiene theories and techniques with emphasis on individual patient's oral health needs and the further development of oral prophylactic and radiographic techniques, including the preparation of diagnostic aids and patient education. Students will gain experience through work in their on-campus clinical assignments. (Prerequisites: DN 114 and DN 201)

**DN 221 Clinical Dental Hygiene IV 1-12-4**
Practical application of dental hygiene theories and techniques with emphasis on individual patient's oral health needs and the further development of oral prophylactic and radiographic techniques, including the preparation of diagnostic aids and patient education. Students will gain experience through work in their on-campus clinical assignments. (Prerequisite: DN 212)

**DN 225 Dental Hygiene Specialty Clinic 0-4-1**
Practical application of dental hygiene theories and techniques with emphasis on the oral health needs of special patient populations. Students will gain experience in a variety of educational and public health settings. (Prerequisites: DN 114 and DN 201)

**DN 227 Dental Ethics and Jurisprudence 1-0-1**
A study of the ethical and legal issues involved in dental care delivery as well as office management procedures.

**DN 239 Medical Emergencies for the Dental Assistant 2-0-2**
Identification of signs, symptoms and action recommended in emergencies encountered in the dental office. Students will actively participate in role playing each emergency situation. (Prerequisite: DN 110)

**DN 240 Dental Hygiene Science** **4-0-4**
Lectures combining the sciences of pharmacology and oral pathology. Pharmacology emphasizes the study of drug origins, properties, dosages and therapeutic effects, specific consideration being given to those drugs used in dentistry and anesthesiology. Oral pathology includes the study of disease affecting the oral cavity, manifestations of inflammation, degenerative changes, neoplastic disease and anomalies. (Prerequisites: DN 136, BI 195, and BI 196)

**DN 242 Community Dental Health I** **2-0-2**
Students will gain information in the arena of public health as it pertains to dental health. Emphasis is on the use of surveys, ways to interpret statistics and overcome barriers encountered in setting up public health programs. (Prerequisite: DN 201)

**DN 243 Community Dental Health II** **1-0-1**
Students will implement the theory base from DN 242 into the spring semester with practical applications of the DN 242 course content. The course will entail completion of various projects and assignments with a community emphasis. (Prerequisites: DN 201, DN 212 and DN 242)

**DN 275 Dental Assisting Theory II** **1-2-2**
A course designed to introduce the dental advanced functions to dental assisting students. Includes instruction in basic instrumentation concepts, removal of coronal cement, application of pit and fissure sealants and suture removal, as well as expanded orthodontic functions and other advanced duties which are delegated to the dental assistant. Pre-clinical skills will be introduced on mannequins and competency skills on patients. Advanced dentrix computer applications will also be included. (Prerequisites: DN 105, DN 110, DN 161, DN 175 and DN 191)

**DN 298 Dental Assisting Clinical Experience III (6 weeks)** **2-8-4**
Expanded opportunities in chair-side assisting to encompass all dental specialties including orthodontics, surgery, endodontics, pedodontics and prosthodontics. A weekly seminar is held to evaluate the individual clinical experiences. (Prerequisite: DN 196)

## Design Visualization

**DV 191 3D Studio Max 2** **3-0-3**
This course is an introduction to 3D Studio Max one of the most powerful software for 3D modeling, rendering and animation. The students learn the basics of 3-D computer modeling and rendering techniques; course topics include shape creation, lofting, material editing, morphing, scaling, light and camera placement, file importing, and rendering. (Prerequisite: working knowledge of AutoCad or permission of department head of Architectural Engineering Technology)

**DV 192 3D Studio Max 2** **3-0-3**
3D Studio Max 2 is an advanced level course which prepares students to develop complex shapes, experiment with the vast capabilities of material editor and generate animations of their models. Students are introduced to a variety of different 3D components, which lead them to a representation project until it includes flat and smoothed forms, light sources, texture maps and the production of animations. In addition, students learn about rendering options and techniques from flat shading to raytracing and radiosity. (Prerequisites: DV 191 or permission of department head of Architectural Engineering Technology)

**DV 193 Introduction to Photoshop** **3-0-3**
This course in structured to introduce students to the powerful tools of Photoshop for manipulating digital images, photo montage and its page layout applications. Students learn the skills and techniques for creating effective digital images for presentations and their use in rendering and visualization. The course topics cover Photoshop tools: channels and layers, typography, illustration, digital file formats, adding special effects through the use of filters, color and image enhancements. (Prerequisite: working knowledge of Microsoft Windows environment)

## Diagnostic Medical Sonography

**DS 201 Principles of Sonography** **3-2-4**
An introduction to principles of ultrasound with emphasis on physical principles, instrumentation and terminology. Laboratory sessions will offer "hands-on" learning techniques.

**DS 221 Sonographic Physics** **3-0-3**
Study of the physical principles involved in ultrasound and state-of-the-art equipment technology. (Prerequisite: DS 201)

**DS 233 Seminars in Sonography** **4-0-4**
Sessions will be used for case presentations by students and preparation for registry exams. (Prerequisites: DS 297 and DS 241)

**DS 241 Principles of Vascular Ultrasound** **3-2-4**
Study of physical and doppler principles utilized in the ultrasound study of vascular structures. Laboratory sessions will introduce students to scanning techniques used in vascular studies. (Prerequisites: DS 201 and DS 221)

**DS 265 Sonographic Anatomy and Pathology I** **3-0-3**
Study of gross, sagittal and cross sectional anatomy of the abdomen and the pathological changes and disease processes which are found in ultrasound examination of the abdominal region.

**DS 266 Sonographic Anatomy and Pathology II** **3-0-3**
A continuation of Sonographic Anatomy and Pathology I with an introduction of small parts anatomy and an in-depth study of pathologic changes and disease processes found in relation to these structures. (Prerequisites: DS 201 and DS 265)

**DS 275 Sonographic Principles of OB/GYN I** **3-0-3**
In depth study of the anatomy of female reproductive organs and associated pathological changes with introduction to first trimester fetal development.

**DS 277 Sonographic Principles of OB/GYN II** **3-0-3**
A continuation of Sonographic OB/GYN I, with emphasis on the continuing process of fetal development and associated pathologic conditions. (Prerequisites: DS 201 and DS 275)

**DS 295 DMS Clinic I** **0-16-4**
Two days per week of observation and direct clinical experience at selected clinical sites designed to familiarize students with working procedures in an ultrasound lab. Basic examination techniques will be performed. The first four weeks will be spent in the campus lab.

**DS 296 DMS Clinic II** **0-24-6**
Three days per week of clinical experience at selected clinical sites. Students will gain continued scanning experience. (Prerequisites: DS 201, DS 265, DS 275 and DS 295)

**DS 297 DMS Clinic III** **0-32-8**
Four days per week at selected clinical sites with emphasis on expanded roles in the ultrasound studies. Students will develop intermediate level skills and recognition of pathology will be stressed. (Prerequisites: DS 221, DS 266, DS 276 and DS 296)

**DS 298 DMS Clinic IV** **0-32-8**
Four days per week of final experience to strengthen scanning and interpretation skills in preparation for challenging registry exams and entry into the sonography field. (Prerequisites: DS 241 and DS 297)

# Early Childhood Education

**EC 102 Foundations in Early Childhood Education and Child Care 3-0-3**

The course provides students with an overview of developmentally appropriate settings for children from birth through age 8. Focusing on play as a foundation of children's learning, students explore the roles and responsibilities of the early childhood professional with children and families in these settings while integrating the influences of early childhood history, philosophy, and curricular models on these programs. Program observations help students make the connections between theory and practice. Using the NH ECE Career Lattice, students discover the diversity of career opportunities available. (Prerequisites: EC 125 and EC 141)

**EC 125 Growth and Development of the Young Child 4-0-4**

Major theories and research findings in the social, emotional, cognitive, and physical domains of development of young children from conception to age eight will be the focus of this course. Emphasis will be placed on applying understanding of the following theories to children's needs in a pluralistic society: progressive education theory, psychosocial theory, behaviorist theory, cognitive theory, sociocultural theory, maturation theory, humanist theory, attachment theory, moral development theory, and multiple intelligences theory. Students will use professional strategies (anecdotal records, time samplings, etc.) to observe and record the behavior of infants, toddlers, preschool, and primary age children in early childhood settings as they explore these theories

**EC 141 Curriculum and Environments 1 3-0-3**

Students will experience designing, implementing, and evaluating appropriate activities and environments for children birth through age six with a focus on emergent literacy supported by music, movement, art, and dramatic play. Students will learn how children develop an understanding of the language processes of listening, speaking, reading, writing, and visually representing by exploring vocabulary development and phonemic awareness. Emphasis will be on concrete, practical application of various philosophies, theories, and current research in early childhood education. Methods of observing children's behavior and progress, and developing and using suitable instructional and play materials will be discussed. Participants will experience and broaden their own creativity and imagination through exploring learning activities that can be applied to actual early childhood settings. Emphasis will be on planning stimulating, age-appropriate classroom and outdoor learning environments that encourage child-initiated discovery and act as a tool in behavior management. These environments will be child and family friendly, barrier free, inclusionary, and meet state regulatory requirements.

**EC 142 Curriculum and Environments 2 3-0-3**

Designing, implementing, and evaluating appropriate activities and environments for children through age six with a focus on blocks, math, science, woodworking, and technology with literacy concepts integrated into each area. Emphasis will be on the concrete, practical application of various philosophies, theories, and current research in early childhood education. Methods of observing children's behavior and progress and developing and using suitable instructional and play materials will be discussed. Emphasis will be on planning stimulating, age-appropriate classroom and outdoor learning environments that encourage child-initiated discovery and act as a tool in behavior management. These environments will be child and family friendly, barrier free, inclusionary, and meet state regulatory requirements. Students will learn about and apply successful attributes of documentation panels that make children's learning visible. (Prerequisite: EC 141; corequisites: may be taken with EC 102, EC 188, EC 190 and EC 242)

**EC 155 Children's Literature 3-0-3**

This course will provide an overview of exemplary authors and illustrators of children's literature from birth to age 8. High quality children's books will be used as a vehicle for supporting and applying current research on the acquisition of language and reading. Students will become familiar with Caldecott award winning books and the artistic techniques used to create these books. Big books will be introduced as a way of distinguishing features of print. Poetry, multicultural books, and bibliotherapy as applied to early childhood education will be studied. Additionally, students will explore the teacher's role in promoting family literacy and participate in service learning on this topic. (Prerequisite: EC 141 unless taken concurrently with EC 141)

**EC 188 Health, Safety and Nutrition in Early Childhood Education 3-0-3**

An introduction to major issues affecting the health and safety of young children in early childhood settings. Nutrition and policy considerations about pediatric medications, infectious disease control, sick child care, universal precautions and liability, and health record keeping will be discussed. Childhood stress and education for the prevention of child sexual abuse will be highlighted. Students will practice developing curriculum for young children related to health, safety, and nutrition that becomes an integrated part of the overall program.

**EC 190 Preparing for Practicum 1-0-1**

This 1 credit course will provide students with an orientation to Practicum including developing individual goals, planning contracts, scheduling, record keeping, writing practicum log entries, preparing the practicum notebook, identifying potential partners, and following professional and ethical guidelines. Students will know all policies and procedures related to practicum and student teaching as outlined in the Practicum Handbook. *Students must earn a "C" or higher in this course and must take it in the semester before Practicum 1.* (Prerequisites: EC 125, EC 141 and EC 155 must be taken the semester before the "Preparing for Practicum" course; may be taken concurrently with EC 102, EC 142 or EC 188)

**EC 212 Planning Infant/Toddler Programs 3-0-3**

Using research on brain development during the first 3 years of life, students will focus on developing appropriate programs for infants and toddlers. Attending to the roles of primary caregiving, transitions, and continuity of care, students will design programs that are responsive to the needs of both children and their families. *The course is not a requirement in the Early Childhood Education associate degree program but will be offered every other year for students interested in specializing with infants and toddlers. Students eligible for funding for this course through the Child Development Bureau may waive prerequisites with permission of the department head of Early Childhood Education.* (Prerequisites: EC 125, EC 141, EC 142 and EC 188)

**EC 220 Developmentally Appropriate Programs for School-Aged Children 3-0-3**

The role and responsibilities of early childhood educators and child care providers in creating developmentally appropriate experiences for school-age children will be addressed. Discussion will include an integrated approach to language, reading, math, science and the arts for primary classrooms and activities such as clubs, projects, hobbies, music, games, and other themes suitable for after-school care programs. The importance of communication in building partnerships between home, school and community will be emphasized. (Prerequisite: EC 120)

**EC 231 Early Literacy Development 3-0-3**

Early literacy development involves listening, speaking, drawing, writing, singing, and acting as well as reading. It includes all the ways children communicate ideas and receive those of others. This course will focus on concepts underlying early literacy development and using children's literature and creative activities to enable students to develop a repertoire of experiences and portfolio of resources to enhance emergent literacy in young children.

**EC 242 Child, Family and Community 3-0-3**

The course will provide an overview of families and family systems (including Bronfenbrenner's Bioecological Theory) with emphasis on developing effective models of teacher/program-family partnerships. Students will study stages of parenthood and apply stages to school/family relationships. Students will identify their own biases as a precursor to exploring issues of power and privilege in society. Cultural dilemmas and

their impact on early care and education will be identified. Students will research various crises encountered by families and carry out an action plan to positively address the crisis. Community resources will be identified and involved. (Prerequisite: EC 125)

**EC 250 Observation, Interpretation, Assessment and Documentation 3-0-3**
Participants will become "students of childhood" as they learn how to interpret and assess their observations of children. They will make the child's growth visible through progress notes and documentation and by sharing their own "wonderings" as teachers. Students will experience the role of "teacher as researcher" as they learn how to appropriately apply various assessment tools in combination with their own observations to identify growth from the perspectives of the child, the teacher, and the curriculum. (Prerequisites: EC 102, EC 125, EC 141 and EC 142; may be taken concurrently with EC 242 and EC 275)

**EC 261 Family Child Care Business Management 3-0-3**
This course will review the fundamentals of sound business practices as they relate to the running of a successful Family Child Care business. Emphasis will be on designing of business plans, budgeting, insurances, effective business policies, contracts, pricing, marketing, customer relations, purchasing, financial, legal and licensing regulations and reports, small business management and related record keeping.

**EC 262 Organization and Management for the Practicing Professional 4-0-4**
A survey of organization and management of early childhood programs and/or child care centers for the practicing professional. Emphasis will be on learning how to plan, organize, manage and evaluate programs and facilities for children. Specific skills addressed are licensing procedures, hiring, motivating and evaluating staff and parent involvement. Financial record keeping to inform program management decisions will be based on an understanding of Excel computer program use. Leadership and visioning skills will also be taught and evidence of implementation will be required. Students will be required to spend fifteen hours outside of class on a final project to be implemented in their professional work. *This course will meet the requirements for Director Certification from the State of New Hampshire. It will also meet the criteria for accreditation by the National Association for the Education of Young Children.* (Prerequisite: permission of department head of Early Childhood Education)

**EC 265 Developmentally Appropriate Guidance of the Young Child 3-0-3**
The emphasis of the course is on the role of positive child guidance in preparing young children to become competent and cooperative individuals. Developmentally appropriate methods of guiding children based on effective communication skills and problem solving will be shared along with strategies for preventing disruptive behaviors in the classroom. Techniques for dealing with more difficult and explosive behaviors will also be discussed. Partnering with parents in developing behavior plans will be emphasized. Students will also come to see how many of these skills transfer to their work with adults in their professional settings. They will be able to use the class as a model for developing parent education programs for the families that they serve. This course is available as a general elective to students in other majors with permission of department head of Early Childhood Education. (Prerequisites: EC 125 and EC 242; may be taken concurrently with EC 276)

**EC 270 Understanding Young Children's Special Needs 3-0-3**
This course will broaden students' awareness of the theoretical and legal foundations for programs serving young children (infancy through age eight) with a wide range of special educational needs. Students will examine the causes, symptoms, social consequences and behavior characteristics of children with special needs. Emphasis will be on education for children and their families. (Prerequisites: EC 102, EC 120, EC 135, EC 140 and EC 185)

**EC 275 Practicum 1 – Child Study and Portfolio 2-5-3**
Students will conduct 3 in-depth child studies over the course of the semester. They will create and manage portfolios for each child, use portfolio information to write child narrative summaries and create a growth and development documentation of each child, and plan and carry out a conference to share information with the parent/guardian. Students will also carry out observations of their practicum environments and Cooperating Teachers as a precursor to more fully understanding their role as a student teacher in Practicum 2. (Students who want a practicum experience in grades 1 or 2 are encouraged to do Practicum 1 with primary aged children.) (Prerequisites: all 100 level EC courses, EC 242, EC 270, a 2.5 GPA in major field courses, permission of the ECE Practicum Coordinator and submission of all required documents; may be taken concurrently with EC 242 and EC 250)

**EC 276 Practicum 2 - Experiencing Emergent Curriculum and Student Teaching 2-10-5**
Students will work in NHTI-approved ECE settings for children in infant/toddler care, preschool, or kindergarten under the supervision of early childhood Cooperating Teacher(s). Weekly seminars conducted by NHTI faculty offer support for students and provide time to review the characteristics of emergent curriculum being implemented by students at their practicum sites. Students must complete a Practicum Notebook outlining their activities with children and families connecting theory to practice. Students will document 150 hours at practicum including 2 full days of lead teaching. Students will prepare documentation of emergent curriculum provocations, ordinary moments, and child growth and development. NHTI ECE faculty schedule site visits to review and evaluate student progress during the practicum experience. (Prerequisites: all 100 level EC courses, EC 242, EC 250, EC 275, a 2.5 GPA in major field courses, permission of the ECE Practicum Coordinator and submission of all required documents; students are encouraged to take this concurrently with EC 265 and 288)

**EC 288 The Early Childhood Professional 3-0-3**
This course explores the role of the early childhood professional in the workplace. Topics to be discussed include leadership, working in a team, and professional ethics. Additionally, students will learn about the legislative process in NH and explore their role in advocating for public policy to support children, families, and early care and education programs. Students will develop a resume and create a professional portfolio that can be used for interview purposes. Emphasis will be placed on the role of ongoing professional development activities, and students will choose a professional development project to complete and share. (Prerequisites: all 100 level EC courses, EC 242, EC 250 and EC 275; may be taken concurrently with EC 276)

## Economics

**EO 101 Macroeconomics 3-0-3**
This course is concerned with the behavior of the economy as a whole, particularly fluctuations in economic activities. Basic elements of economic reasoning are applied to the public policy issues of unemployment, inflation, and economic growth. A brief survey of the history of economic ideas is followed by a study of the consequences for national policy of the changing institutional structure of the U.S. economy, and of the conflicts inherent in, and generated by, competition and private enterprise. Analytic tools are used to evaluate monetary and fiscal policies and to understand current macroeconomic controversies.

**EO 102 Microeconomics 3-0-3**
An investigation into the functioning and politics of the U.S. economy from the vantage of the marketplace, emphasizing microeconomics, wage bargaining, taxation and the distribution of wealth and income. Topics include the theories of demand and production, and the determination of prices and quantities for commodities and factors of production in competitive and noncompetitive markets.

# Education

**ED 101 Introduction to Exceptionalities 3-0-3**
This course will introduce the basic values that underlie supporting students who experience disabilities and the roles of teachers and paraeducators in supporting those individuals including: the value of inclusion in home, education, work and community life; respect for the inherent worth and dignity of each person; respect for students' basic rights to effect the conditions of their own existence. Through readings, in-class discussions, and on-site visits to schools and classrooms, pre-service teachers and paraeducators will develop strategies on how to facilitate students' independence, learning, social connections, and self-advocacy skills. Curriculum will emphasize the philosophical and practical applications of a variety of theorists with a focus on valuing diversity, collaborating with other educators, curriculum modifications and accommodations, and problem solving strategies (10 hours of classroom observation required).

**ED 104 Foundations of Education 3-0-3**
This is a survey course which investigates the philosophical, historical and social/cultural character of education in the United States. It is intended to be an examination of how schools function organizationally. Discussions will include the role of education, system philosophy and trends which have shaped contemporary education; field observations are included. This course is a concentration requirement for both Special Education and Education associate degree programs; while it is intended to be the first in a series of learning experiences for those interested in careers as teachers, it also fulfills a Social Science elective requirement (10 hours of classroom observation required).

**ED 106 Paraeducator Portfolio 1-6-3**
As a requirement of the No Child Left Behind legislation, paraeducators must complete a portfolio demonstrating knowledge and skills competencies in the areas of math, reading and writing, and the ability to assist in math, reading and writing instruction. This course guides students in the preparation and completion of the required portfolio through a series of workshops and assignments presented at individual school districts. Upon successful completion of the portfolio, students receive a letter of recognition from the State of New Hampshire Department of Education acknowledging they have achieved "highly qualified" status under No Child Left Behind.

**ED 200 Supporting Students with Challenging Behaviors 4-0-4**
This course will provide pre-service teachers and paraeducators with knowledge and skills for supporting students with challenging behaviors, using the framework of *positive behavioral supports*. Future teachers and paraeducators will gain knowledge of the basic assumptions about the context and functions of behavior and understand the role that behavior plays in helping students influence people and events in their environment, meet their basic needs, and/or avoid unpleasant situations. By developing strategies to determine the functions of certain behaviors, pre-service teachers and paraeducators will gain new and effective strategies for supporting students who demonstrate challenging behaviors in the classroom. The focus on the teaching of new skills (as opposed to intrusive interventions that rely on the elimination of challenging behaviors) will provide students with effective, positive approaches that respect the dignity of the individual and facilitate social inclusion (Prerequisite: ED 101 or permission of department head of Education) (20 hours of service learning required).

**ED 201 Legal Issues in Education 3-0-3**
Predicated upon legislative requirements such as the Individuals with Disabilities Education Act (IDEA), this course considers the theories and issues explored in ED 101, ED 207, ED 204 and ED 212 in the context of inclusive instructional settings. Students will develop an understanding of the various legal requirements as well as effective instructional strategies for curriculum adaptation and delivery within the context of Federal and NH State Special Education and Education laws and procedures. (Prerequisite: ED 207 or permission of department head of Education)

**ED 203 Teaching Strategies for Diverse Learners 3-0-3**
The focus of this course is on the development of typical speech and language skills and the effects of various disabilities on language development, including impaired speech, reading, language, and processing. The characteristics of children and youth with language disabilities are discussed. Strategies to assist students' functioning in school, at home and in the community are explored. Emphasis is placed on accommodating students versus "helping" students by completing work for them. A variety of practical techniques is studied and practiced through in and out of class exercises. Collaborative teaching is used by students to demonstrate their knowledge and skills. In addition, students learn a variety of study strategies, including mnemonics, double column notes, reading strategies, concepts of active versus passive learning, and organization and time management skills. Students are expected to work in small groups to develop strategies to teach these various skills to their peers in the class. In addition, students work a minimum of 20 hours in an approved field site. Students maintain a record of their field work. Innovation and creativity are critical for success in this course. (Prerequisites: ED 101 and EN 101; or permission of department head of Education)

**ED 204 Instructional Technology 3-0-3**
This course presents the theory and strategies for effective integration of technology resources and technology-based methods of instruction, and assistive technology designed for students with disabilities. A background of mediated instruction will be provided along with a review of the qualities and benefits of various technology options, including assistive technology, available to instructional settings. Opportunities to apply instructional delivery using common forms of media, multimedia, computers and specialized programs for students with disabilities will be integral to this course, in addition to contemplation of future issues of integration of technology and matters of time and place of the learning experience. (Prerequisite: ED 207 or permission of department head of Education)

**ED 207 Teaching and Learning Process 3-0-3**
An applications-oriented version of the prerequisites, this course provides an examination of the various contemporary theories of teaching and learning. It will focus on developing an understanding of the learning needs and learning styles of students as individuals in the context of the learning environment. Attention will also be given to the assorted instructional modalities which may be employed and the issues involved in matching teaching methods to students' learning styles while considering the context and environment of the learning experience. (Prerequisites: ED 101 or ED 104)

**ED 212 Design of Instruction 3-0-3**
An introduction to the design and development of the content of learning experiences. Curriculum theory will be introduced, and an examination of the processes of curriculum development, use and evaluation will also be investigated. The broad questions, "What do students need to learn?" , "How is the learning experience most effectively managed?" and "How do we know the desired outcome was attained?" will be addressed. (Prerequisite: ED 207 or permission of department head of Education)

**ED 220 Field Experience in Education 1-6-3**
Practical experience in a learning environment. The student spends a minimum of 45 hours per semester in a supervised assigned learning environment and participates in a weekly seminar. In the instructional environment, students will work with individuals and groups, as well as develop and deliver an instructional unit. This is a concentration requirement for the Associate in Science in Education program. (Prerequisite: permission of department head of Education)

**ED 223 Instructional Approaches in ESOL Tutoring 2-3-3**
This course focuses on the development of the knowledge and skills needed in tutoring ESOL (English for Speakers of other Languages)

learners. The content of this course includes a variety of useful techniques in the field, including the strategies for tutoring learners in developing reading comprehension skills. Through interactive instruction, group discussions and practical activities, students will demonstrate a clear understanding of their role as educational supporters of ESOL teachers and language tutors in assisting ESOL learners with school work, cultural transition and social interaction. This course includes a minimum of 45 hours of practicum which provides the opportunity to apply the techniques learned in class. (Prerequisite: ED 101 or ED 104 and/or permission of the department head of Education)

**ED 230 Essentials of Career and Technical Curriculum and Instruction 3-0-3**

This course will explore the history, philosophy, principles, organization, and operation of career and technical education in the United States. Students will develop a functional understanding of the role and responsibilities of a professional career and technical educator. This course will provide the participant with the foundation and skills needed to design, implement and manage a curriculum in career and technical education. Identification of resources and occupational analysis, derivation of content, formulation of objectives, defining measurable learning outcomes and the selection and development of activities and evaluation methods will be explored.

## Electronic Engineering Technology

*In addition to listed prerequisites, students must earn grades of "C-" or higher in each course to progress in the program.*

**EL 101 Electric Circuits 3-3-4**

A beginning course in electricity, this course covers basic electric circuit theory, the nature of electricity, resistance, current and voltage. Detailed coverage of topics includes direct current, alternating current, Ohm's law, series circuits and parallel circuits as well as energy and power relationships. This course also covers dc circuit analysis techniques including mesh and nodal analysis, and network theorems such as Norton's, Thevenin's and maximum power transfer. The transient response of capacitors and inductors are discussed when a dc voltage is applied using the various circuit and analysis techniques. Additional topics include the discussion of alternating waveform characteristics and analysis of sinusoidal alternating waveforms. Laboratory experiments are designed to reinforce the classroom work. (Corequisite: MT 133 and EL 115 or permission of the Department Head of Electronic Engineering Technology)

**EL 102 Circuit Analysis 3-3-4**

A continuation of Electric Circuits. This course covers A-C circuit analysis techniques including mesh and nodal analysis, and network theorems such as Norton's, Thevenin's, and maximum power transfer. Treatment is given to circuits containing dependent and independent sources of voltage and current. Resonance and basic filters are covered in detail as well as magnetism. Additional topics covered, as time allows, are transformers and three-phase circuits. Laboratory experiments are designed to reinforce the classroom work. (Prerequisites: EL 101, EN 101, and MT 133; or permission of department head of Electronic Engineering Technology)

**EL 110 Electronics I 3-3-4**

This is a study of the physical behavior of electronic devices. Emphasis is on analysis and application of electronic circuits utilizing semiconductor diodes, operational amplifiers, and transistors. Topics covered include rectification, clipping and clamping circuits, regulated power supplies, basic op-amps, biasing of transistors, and simplified AC modeling of transistor circuits. Engineering Design Automation (EDA) tools are used to reinforce the theory through electronic analysis simulations. Laboratory experimentation reinforces classroom theory with practical work. (Prerequisites: EL 101)

**EL 115 Digital Fundamentals 2-3-3**

Open to all majors, this introductory digital course is designed for students with little or no electronics skills. Topics covered include basic logic gates, Base 2, 10, and 16 number systems, BCD, Gray and ASCII codes, Boolean algebra, Karnaugh maps, flip-flops, counters, programmable logic devices and other related digital devices. Hands-on laboratory experiments, which augment the learning process, are an integral part of this course. The labs demonstrate real world implementation of otherwise abstract academic concepts and provide valuable experience in breadboarding, testing and debugging circuits. (Prerequisite: Algebra I or permission of department head of Electronic Engineering Technology)

**EL 144 Embedded Microsystems 3-3-4**

Personal computers are used to host an integrated hardware/software development system for applications with embedded Microcontrollers. A system level approach to the specification, decomposition, hardware/software development, and system integration for the implementation of embedded systems is covered through lecture and laboratory experiments. Topics covered include microprocessor architecture, instruction sets, interfacing, and real-time programming techniques in assembly language. Laboratory exercises consist of system level development in serial and parallel data transfer, data acquisition, and analog input and output signal processing**. (**Prerequisites: CP 107, EL 101 and EL 115 or permission of department head of Electronic Engineering Technology)

**EL 210 Electronics II 3-3-4**

This course is a continuation of Electronics I covering more advanced electronics topics with a variety of applications. The non-ideal characteristics of op-amps and other electronic devices will be discussed with applications emphasizing offset, gain and linearity. Other topics may include but are not limited to: sensors, pulse width modulations, Bode plots, SCRs, TRIACs and optoelectronics. EDA tools are used to reinforce the theory with electronic analysis simulations. (Prerequisites: EL 110; corequisite: EL 102 or permission of the Department Head of Electronic Engineering Technology)

**EL 215 Advanced Digital Electronics 3-3-4**

Advanced topics in digital electronics are covered in this course. These topics include the internal structure of logic families, complex digital circuits, synchronous logic, A/D and D/A conversion, timing diagrams, computer bus systems, programmable logic devices (PLD), and complex circuit debugging using a logic analyzer. The topic of digital interfacing is also covered. This includes interfacing various logic families to each other as well as interfacing logic to various /O loads, such as inductive loads and 120VAC loads. (Prerequisites: CP 107, EL 110, EL 115 or permission of department head of Electronic Engineering Technology)

**EL 251 Advanced Topics in Electronics 3-3-4**

This course introduces students to advanced applications in electronics. Topics covered include but are not limited to: an introduction to electronic communication theory including digital communications, fiber optics, programmable logic controllers and human-machine interface. Laboratory exercises are used to reinforce classroom theory. (Prerequisite: EL 210 or permission of the Department Head of Electronic Engineering Technology)

**EL 305 Design Project Preparation 1-5-3**

This course contains the background material and preparation necessary for Senior Design Project (EL 306) and consists of two separate learning modules which are studied concurrently. Module one covers the mechanics of designing and fabricating printed circuit boards. This includes the use of Electronic Design Automation (EDA) tools including, but not limited to, schematic capture and printed circuit board layout. An overview of current industry standards of workmanship and safety is included. In the second module, the student selects a project, obtains approval for that project and develops project definition. Much latitude is given in selecting a project. Projects may be undertaken individually or as teams. They may be internal or collaborative with industry. The project may involve developing a specific circuit or a more general exposure in an

appropriate industrial environment. Ultimately, the project must meet the requirements outlined in EL 306 Senior Design Project and receive final approval from the instructor. Having received final approval, the definition will serve as a guideline for the next phase of the senior project. (Prerequisites: EL 110 and EN 125; corequisites: EL 102 and EL 210; or permission of department head of Electronic Engineering Technology)

**EL 306 Senior Design Project** **2-5-4**
This course is the culmination of two years of theoretical study in the electronics engineering field and is intended to exercise and enhance the student's practical competency in that field. Combined with its preparation course (EL 305) each student will be involved with design, development, implementation, and testing of a curriculum related design as required by Project Definition developed by the student in EL 305. An accurate record of time invested is to be kept, all work is to be documented in a logbook, and regular progress reports are to be submitted. As the project nears completion, a technical write-up will be required as well as a formal presentation of the project. (Prerequisite: EL 305; corequisites: EL 215 and EL 251; or permission of department head of Electronic Engineering Technology)

## English

**EN 100 Introductory English** **4-0-4**
Designed to prepare students for English Composition, this course covers three basic areas: grammar and usage, paragraph development, and an introduction to the writing process. The needs of individual students are stressed. *The four institutional credits awarded for this course do not count toward graduation requirements but are calculated into GPA.* Students must receive a grade of "C" or higher in EN 100 to be eligible to enroll in EN 101 English Composition.

**EN 101 English Composition** **4-0-4**
Required of all freshmen, and designed to teach students to write clear, vigorous prose. An individualized approach which emphasizes the composing process is used. *Available in Honors format.*

**EN 102 Introduction to Literature** **3-0-3**
An introductory survey exposing the student to representative works from the major genre forms: fiction, poetry and drama. *Available in Honors format.*

**EN 104 Communication Systems within Organizations** **4-0-4**
This course presents the fundamentals of human communications as applied to organizations. Areas of study include verbal and written communication, observation, and listening skill development.

**EN 120 Communications** **3-0-3**
Principles and techniques of personal and group communications skills are developed. Topics include impromptu and prepared public speaking; language use; kinesics and paralanguage; listening skills. *Available in Honors format.*

**EN 121 Introduction to Film** **3-0-3**
The art, history, technology and theory of the narrative motion picture from the silent period to the present.

**EN 125 Communication and the Literature of Science and Technology** **3-0-3**
Built around the theme of science and technology, this course focuses on improving communication skills. Areas of study include critical reading, critical thinking, public speaking, interpersonal communication and writing. Topics of readings may vary and could include any of the following: physical and technical sciences; natural and health sciences; or social sciences.

**EN 150 Introduction to Drama** **3-0-3**
An introductory survey involving the study of drama as literature and performance beginning with the Greeks and continuing through Shakespeare to the present.

**EN 160 Introduction to Poetry** **3-0-3**
A course designed to make students aware of the aesthetic value of poetry and to develop their critical skills as readers. Included is an in-depth study of the various genres and structural elements of poetry. Genres considered are sonnet, ode, elegy, ballad, epic, dramatic monologue and open form. Structural elements surveyed include imagery, sound, rhythm, rhyme, tone and diction.

**EN 210 British Literature I** **3-0-3**
This course traces the development of British literature from the Middle Ages through the early eighteenth century and includes readings in poetry, fiction, essay, and drama. Authors' works will be examined within the cultural, philosophical and political climate in which they were created. (Prerequisite: Successful completion of EN 101 or equivalent and an introductory level literature course are highly recommended.)

**EN 211 British Literature II** **3-0-3**
This course traces the development of British literature from the late eighteenth century to the present. The poetry, fiction, essays, and dramas of several major authors of the Romantic, Victorian and Modern periods will be studied. Authors' works will be examined within the cultural, philosophical and political climate in which they were created. (Prerequisite: Successful completion of EN 101 or equivalent and an introductory level literature course are highly recommended.)

**EN 214 American Literature Survey I: to 1865** **3-0-3**
An historically-based survey course covering American literature from first (native) American literature to the Civil War. It is designed for English majors and others interested in the character and history of United States literature. Students read representative major, as well as minor, writers from various literary periods and movements. Readings will be set in historical and cultural contexts. (Prerequisite: Successful completion of EN 101 or equivalent and an introductory level literature course are highly recommended.)

**EN 215 American Literature Survey II: 1865 - present** **3-0-3**
An historically-based survey course covering American literature from 1865 to the present. It is designed for English majors and others interested in the character and history of United States literature. Students read representative major, as well as minor, writers from various literary periods and movements. Readings will be set in an historical and cultural context. (Prerequisite: Successful completion of EN 101 or equivalent and an introductory level literature course are highly recommended.)

**EN 221 Film Genres and Directors** **3-0-3**
This course is an advanced, focused examination of the art, history and theory of a body of narrative films, which may be related by genre, filmmaker, country, style, movement, theme and/or culture and ideology. The course utilizes viewings, lectures and class discussion and emphasizes film theory, criticism and history. *NOTE: this course may be repeated for credit as topics change, providing student earned a grade of "C" or better.* (Prerequisite: Successful completion of both EN 101, or equivalent, and EN 121 or permission of department head of English. An introductory level literature course is highly recommended)

**EN 251 Contemporary Drama** **3-0-3**
A seminar discussion of major drama since the 19th century. Some playwrights include Shaw, Miller, O'Neill, Albee, Pinter and Beckett. (Prerequisite: Successful completion of EN 101 or equivalent and an introductory level literature course are highly recommended.)

**EN 255 Shakespeare** **3-0-3**
A survey of representative works from the histories, comedies and tragedies. Works considered are chosen from *Midsummer Night's Dream, Much*

*Ado About Nothing, As You Like It, Henry IV, Hamlet, Othello, King Lear,* and *The Tempest.* (Prerequisite: Successful completion of EN 101 or equivalent and an introductory level literature course are highly recommended.)

**EN 272 Modern American Short Fiction** **3-0-3**
A chronological study of the structural and thematic changes that have occurred in the short story art form during the past ninety years. Literary trends in late romanticism, realism, naturalism and postnaturalism, as well as background material of the periods are studied to gain a better understanding of each writer's style and intention. (Prerequisite: Successful completion of EN 101 or equivalent and an introductory level literature course are highly recommended.)

**EN 285 Literature, Technology and Culture** **3-0-3**
American literary works that deal with the cultural implications of science and technology are studied. A wide range of readings in science, traditional literature, and science fiction will be considered. (Prerequisite: Successful completion of EN 101 or equivalent and an introductory level literature course are highly recommended.)

**EN 287 Women in Literature** **3-0-3**
Images and roles of women in literature are traced from historical to contemporary times through a study of selected works in fiction, poetry and drama. (Prerequisite: Successful completion of EN 101 or equivalent and an introductory level literature course are highly recommended.)

**EN 291 Contemporary Issues and World Literature** **3-0-3**
An investigation of current and enduring issues through world literature. Emphasis on 20th century works, but works from other periods also considered. Topics vary from year to year and with the instructor. See department for details of current offerings. (Prerequisite: Successful completion of EN 101 or equivalent and an introductory level literature course are highly recommended.) *Available in Honors format.*

**EN 295 Creative Writing: Fiction** **3-0-3**
This is a course designed for writers interested in learning more about the craft of fiction writing. Students will examine published short stories in the classic and contemporary canon as well as present and critique their own work and the work of others. Additionally, the students will explore some of the genres of fiction in more depth including science fiction and fantasy, mystery and children's books. Lectures on preparing a manuscript for submission and the publishing industry are included as well. *Available in Honors format.* (Prerequisite: EN 101 or permission of instructor. Students who do not have the prerequisite may be asked to submit a writing sample before enrollment is confirmed. Suggested additional prerequisite: a literature elective.)

## English as a Second Language

**LS 101 Basic Writing** **3-0-3**
This course focuses on developing writing skills at the paragraph level. Students will have opportunities to develop writing skills through a learning process that integrates reading, writing, and grammar practice. In learning and practicing a variety of writing tasks, students will gain increasing competence in expressing themselves in appropriate written English in an academic context. The developmental process also encourages cultural learning. *The three institutional credits awarded for this course do not count toward graduation requirements but are calculated into GPA. LS 101, LS 102 and LS 103 are required for matriculated students who have earned less than 500 on the Test of English as a Foreign Language (TOEFL) (less than 173 on computer-based test); students scoring over 500 (over 173 on computer-based test) are strongly recommended to take one of the three courses; waiver options are available; course is also open to non-matriculated students.*

**LS 102 Pronunciation Matters** **3-0-3**
The purpose of this course is to guide students into speaking clear and natural American English. It addresses basics in pronunciation for clear communication. Contents include sound/spelling patterns, syllables, consonant/vowel problems, linking, stress, and rhythm. The course will be a learner-centered, encouraging interactive activities and practice. *The three institutional credits awarded for this course do not count toward graduation requirements but are calculated into GPA. LS 101, LS 102 and LS 103 are required for matriculated students who have earned less than 500 on the Test of English as a Foreign Language (TOEFL) (less than 173 on computer-based test); students scoring over 500 (over 173 on computer-based test) are strongly recommended to take one of the three courses; waiver options are available; course is also open to non-matriculated students.*

**LS 103 Reading Comprehension Skills** **3-0-3**
The main goal of this course is to move learners toward a higher proficiency level of reading comprehension and cultural understanding of the concepts, jargon, and texts related to modern technology. Classes will emphasize a developmental process that integrates reading comprehension, vocabulary expansion, problem solving, and cultural learning. Readings from journals or newspapers will be used as sample material to motivate students. *The three institutional credits awarded for this course do not count toward graduation requirements but are calculated into GPA. LS 101, LS 102 and LS 103 are required for matriculated students who have earned less than 500 on the Test of English as a Foreign Language (TOEFL) (less than 173 on computer-based test); students scoring over 500 (over 173 on computer-based test) are strongly recommended to take one of the three courses; waiver options are available; course is also open to non-matriculated students.*

**LS 104 Learning English in the Cultural Context I** **3-0-3**
This is the first of a two-course sequence of Learning English in the Cultural Context. The major purpose of these courses is to assist students in achieving their academic goals as well as social goals. Using an educational television series for ESL learners, *Crossroads Café,* these courses will address the four basic language skills: speaking, listening comprehension, reading and writing in American English with a primary focus on developing authentic, student-generated conversation. Students will be guided to explore North American culture, society, and interpersonal relationships through a series of thirty-minute episodes (videos). These episodes "tell the story of a group of hardworking, determined people whose lives come together at a small neighborhood restaurant called "Crossroads Café." In addition, students will use a variety of authentic secondary texts related to or derived from the contents of each episode. *The three institutional credits awarded for this course do not count toward graduation requirements but are calculated into GPA.*

**LS 201 Academic Writing** **3-0-3**
The goal of this course is to continue to prepare students for English composition and other academic writing at the college level. It focuses on developing writing skills at the essay level. Students will move from writing structured paragraphs to organizing, drafting, and revising complete essays. Course content includes introduction to patterns of essay organization such as the comparison and contrast, cause and effect, and process analysis. Grammar and complex sentence structures will be reviewed as needed. *The three institutional credits awarded for this course do not count toward graduation requirements but are calculated into GPA.*

**LS 202 Clear Communication** **3-0-3**
The primary goal of this course is to help non-native speakers of English develop skills of oral communication and listening comprehension. Various pronunciation needs for communicating more effectively in academic or professional settings will also be addressed. The learner-centered instruction guides students in developing communicative English through a variety of interactive practices including stresses of words, intonations of sentences and styles of communication. *The three institutional credits awarded for this course do not count toward graduation requirements but are calculated into GPA.*

**LS 203 Grammar Practice** **3-0-3**
This course focuses on training students in developing proficiency through active grammar practice. Students will have various opportunities to learn grammar structures through systematic themes as well as practical

application through exercises. Reading and other communicative activities will be integrated. Grammar exercises will cover a broad content of both a scientific and humanistic nature as well as selections from TOEFL. *The three institutional credits awarded for this course do not count toward graduation requirements but are calculated into GPA.*

**LS 204 Learning English in the Cultural Context II** **3-0-3**
This is the second course in a two-course sequence of Learning English in the Cultural Context. The course will continue to assist students to develop their skills in speaking, listening comprehension, reading and writing in American English with a primary focus on developing authentic, student-generated conversation. The second half of the video series *Crossroads Café,* as well as a variety of authentic secondary texts related to or derived from the content of each episode, will be used to assist students in achieving their academic and social goals. *The three institutional credits awarded for this course do not count toward graduation requirements but are calculated into GPA.*

**LS 211 English for the Workplace** **3-0-3**
This course is designed to give students an introduction to communicative English in work settings. Students will learn basic interviewing skills, telephone techniques and how to write simple business correspondence in English. American workplace culture will be introduced through an interactive learning process. *Three institutional credits awarded for this course do not count toward graduation requirements but are calculated into GPA.*

**LS 222 English for Health Sciences** **3-0-3**
This course is designed for those students who wish to enter or who are already working in the health field but do not yet have a sufficient mastery of English to ensure success. Students will have opportunities to learn and broaden their vocabulary of medical terminology in such areas as Anatomy and Physiology and Human Biology. Students will also be guided to use the language in their class discussions, collaborative research, presentations and interpersonal communication. This class can be taken by ESL students in preparation for A&P and Microbiology courses offered at NHTI. *Three institutional credits awarded for this course do not count toward graduation requirements but are calculated into GPA.*

## Fine Arts

*The following statement applies to courses marked* **KJCAS; studio fee***:*

*Courses will be offered at Kimball-Jenkins Community Art School (KJCAS) on North Main Street in Concord. Students should expect to pay $75-120 for supplies and materials in addition to tuition and fees. Supplies and materials fees will be paid directly to KJCAS.*

**FA 101 Introduction to Drawing** **2-4-4**
Students in this course will gain the basic skills and insights necessary to create drawings that are both accurate and expressive. Explorations of line, value and form will engage the eye and the hand as well as the heart. Students will gain confidence in their own vision and their ability to draw what they see. **(KJCAS; Studio Fee)**

**FA 102 Introduction to the Visual Arts** **3-0-3**
The purpose of this course is to introduce students to the languages, concepts, and practices of art through visual and art historical perspectives. Students will be engaged in discussion about the elements of art, such as content, composition, style, method and materials. Students will also be introduced to all of the visual art practices, including drawing and painting, sculpture, printmaking, photography, conceptual and installation art, video art, earthworks, and performance art, as well as craft and graphic design.

**FA 103 Two-Dimensional Design** **2-3-3**
This course is designed to provide students with a solid foundation in two-dimensional design and color theory. Students will learn the basic elements needed to form visual patterns and proceed to explore a variety of approaches relating to visual organization and pictorial composition. A section of the course will be dedicated to the fundamentals of color theory, its function and application. **(KJCAS; Studio Fee)**

**FA 104 Three-Dimensional Design** **2-3-3**
This is a foundation course introducing the student to the technical and conceptual elements for the organization and development of three-dimensional structures. Beginning projects will address the basic elements needed to explore a variety of approaches relating to form and space, then move to more complex issues involving the relationships between form and function. (Prerequisite: FA 103) **(KJCAS; Studio Fee)**

**FA 105 Introduction to Music** **3-0-3**
This course offers a fundamental approach to perceptive listening based on a detailed study of several masterpieces representing different periods and forms. The pieces will be studied from aesthetic and historical perspectives.

**FA 106 The History of Jazz, Blues and Rock and Roll** **3-0-3**
This course examines the history of three of America's great musical contributions to world culture—jazz, blues and rock & roll—via detailed study of several masterpieces in each genre. Students will explore the fundamental musical elements, the historical roots and the development of musical traditions of each style. Various listening and vocal music guides will facilitate the student's knowledge and awareness.

**FA 110 Art Appreciation** **3-0-3**
This course combines experience in the appreciation of painting, sculpture and architecture so that the student may analyze and interpret works of art. The class will study the artists' materials, messages and language (i.e., color, line, shape, shade, texture, volume, space and composition).

**FA 111 Survey of Western Art History I** **3-0-3**
This course examines the history of western civilization through the study of objects created by people from various western cultures – from the cave paintings of the pre-historic era to the great cathedrals of Europe during the 12th and 13th centuries. Students will study the artifacts, architecture, painting and sculpture that inform understanding of a culture's way of life, beliefs, and priorities. In turn, students will gain a deeper understanding of today's culture and society. Students will also develop the basic skills and vocabulary necessary to critique a work of art.

**FA 112 Survey of Western Art History II** **3-0-3**
This course examines the history of painting, sculpture and architecture created by Western Europeans from the early 14th century through the 19th century (and beyond if time permits). These works of art will be studied as a way to understand the way of life, beliefs and priorities of these societies, as well as contemporary culture. Students will also continue to develop the basic skills and vocabulary necessary to critique a work of art. (Prerequisite: successful completion of FA 111)

**FA 115 History of Modern Art** **3-0-3**
This course is a comprehensive study of the artistic tendencies known as Modern Art that occurred between the French Revolution in 1789 and the outbreak of World War II in 1939. Postmodernism, Pluralism and Contemporary Art are introduced. Emphasis is placed on two-dimensional art, sculpture and architecture. Students explore the creative processes that were employed by international artists as they expressed their shared ideals.

**FA 120 Introduction to Oil Painting** **2-4-4**
An introduction to the basic techniques of oil painting, concentrating on the principles of color and light. Using a variety of subject matter, students will explore the problems of pictorial composition, color theory, oil-related mediums and techniques. **(KJCAS; Studio Fee)**

**FA 125 Introduction to the Traditional Arts** **2-4-4**
Courses offered under this title allow students to work with established

artists to develop skills using tools and methods used to create functional artwork throughout history.

**FA 125A Woodworking in the Hand Tool Tradition 2-4-4**
This course will focus on the skills and insights necessary to find beautifully functional spoons in the tree and to extract them by techniques traditional to the New England farm shed. Students must attend all of the first six classes, after which no more than two absences will be allowed without penalty. **(KJCAS; studio fee)**

**FA 130 Introduction to Photography 2-4-4**
This basic photography course is designed to familiarize the student with the use and care of photographic equipment, a 35mm manual camera, as well as developing and darkroom printing techniques. The assignments are designed to cover a variety of shooting situations, and the expectation is that the student will apply the elements of composition to and demonstrate proficient technical ability with expressive content in the making of pictures. Students should expect to provide their own 35mm camera. **(KJCAS; Studio Fee)**

**FA 135 Introduction to Ceramics 2-4-4**
This introduction to ceramics will focus on studio work leading to the completion of five projects. Students will learn the basics of handbuilding, the potter's wheel, kiln firing, glazing, and surface embellishment. Class time will be made up of instructor's demonstrations, group critiques, and individual studio work. Projects will stress the sculptural potential of clay with a visit into the aesthetic merit of functional vessel making. A research project, introducing students to the work of contemporary clay artists, will provide inspiration and direction. **(KJCAS; Studio Fee)**

**FA 140 Introduction to Modern Dance 1-4-3**
This course is designed to guide students' knowledge and awareness of the performing art form that is Modern Dance through the study of the history of modern dance via assigned readings and viewings of videotaped performances by various modern dance companies and through the physical development of a basic movement vocabulary, elementary dance technique, improvisation exploration, and composition. Students must wear fitted sweat pants, running pants or shorts, and fitted T-shirts or a leotard with footless tights or other dance/exercise clothing during class sessions. (This course will be taught at the Petit Papillon dance studio, which is a 10-15-minute drive from the NHTI campus. Students should plan their schedules to accommodate travel time. )

**FA 150 Introduction to Guitar 3-0-3**
This course offers a fundamental approach to learning the guitar for beginning students with varied levels of experience. Students will be involved with and exposed to performance situations, some practical applications of music theory as well as different playing styles and techniques. *Students must provide their own instruments. Acoustic instruments only.*

**FA 201 Drawing II 2-4-4**
This advanced drawing class builds upon the aesthetic, technical, and conceptual foundation established in FA 101 (Introduction to Drawing). This observational drawing course will develop greater technical facility with materials and explore methods for translating and interpreting one's environment onto a drawing. As conceptual options and skill with materials increase, drawing will become a stronger outlet for personal and creative expression. Students will expand their understanding and use of color and work more extensively from the human figure. The historical foundation of drawing will be explored, as well as contemporary and historical trends. (Prerequisite: FA 101) **(KJCAS; Studio Fee)**

**FA 220 Painting II 2-4-4**
This course involves further development of skills and concepts covered in FA 120 (Introduction to Oil Painting) while emphasizing individual expression within the parameters of structured studio projects. This course is intended to advance the student's understanding of visual organization and design through the development of a personal painting vocabulary. (Prerequisite: FA 120) **(KJCAS; Studio Fee)**

# Foreign Language

**FL 104 American Sign Language for Beginners 3-0-3**
This course will introduce students to basic knowledge and skills of American Sign Language. Students will achieve the beginning levels of fluency in communicating through the use of ASL.

**FL 105 Advanced American Sign Language 3-0-3**
This course will teach students the advanced skills and knowledge of American Sign Language. Students will achieve fluency in communicating through the use of ASL.

**FL 110 Elementary Japanese I 3-0-3**
An introduction to modern Japanese language and culture. Students can expect to master basic reading and writing skills. Emphasis, however, will be placed on developing listening skills and speaking skills. A variety of materials will be utilized to expose students to Japanese culture. No previous knowledge of Japanese required.

**FL 111 Elementary Spanish I 3-0-3**
A fully integrated introductory Spanish course. The course is designed for beginning Spanish students whose learning objectives and needs are in any of the following categories: continued language study, business purposes, or travel. The emphasis is to develop proficiency in communicative skills concentrating on the dynamic application of the living language taught through dialog, phonetics and vocabulary. A strong grammar foundation and other basic language skills are taught through actual phrases and sentences, helping the student develop an instinctive sense of the correct usage. These objectives will be achieved through the following approaches: speaking, listening, reading, writing, and cultural studies.

**FL 112 Elementary Spanish II 3-0-3**
A fully integrated intermediate Spanish course. The course is designed for intermediate Spanish students whose learning objectives and needs are in any of the following categories: continued language study, business purposes, or travel. The emphasis is to consolidate and reinforce the language skills acquired in Elementary Spanish I or the equivalent and to continue building communicative skills and cultural appreciation. The course continues to offer a comprehensive review of basic first year grammar structures, while developing proficiency and advancement in communicative skills concentrating on the dynamic application of the living language taught through dialog, phonetics and vocabulary. A strong grammar foundation and essential language skills are taught through actual phrases and sentences, helping the student develop an instinctive sense of the correct usage. These objectives will be achieved through the following approaches: speaking, listening, reading, writing, and cultural studies. (Prerequisite: FL 111, the equivalent or permission of department head of English)

**FL 115 Elementary German I 3-0-3**
This course is designed for beginning German students who are interested and motivated in speaking and learning about the rich German language and culture. It is designed for continued language study, travel and business purposes. Since a German native speaker will be teaching the course, the emphasis will be in communicative as well as written skills of the living German language. Vocabulary and phonetics studies will be enhanced through visual and auditory means. Dialogue and oral presentations will help students form and develop these skills. For correct usage of the language, a strong grammar foundation will be given through multiple reading, speaking, writing and listening practices. Current German topics will also be discussed and there will be German guest speakers.

**FL 116 Elementary German II 3-0-3**
This course is designed for students who have been exposed to the German language and have knowledge of German present-, past- and present perfect-tenses. Students should be motivated and interested in speaking

German and learning about the rich German culture. The class is designed for continued language study, travel and business purposes. Since a German native speaker will be teaching the course, the emphasis will be in communicative as well as written skills of the living German language. Vocabulary and phonetics will be enhanced through visual and auditory means. Dialogue and oral presentations will help in forming and developing these skills. For correct usage of the language a strong grammar foundation will be given through multiple reading, speaking, writing and listening practices. German history and current German topics will also be discussed and there will be German guest speakers.

**FL 121 French I** **3-0-3**
An introduction to basic French language, history, and culture through a balanced four-skills approach to learning through listening, speaking, reading, and writing activities. Multimedia resources, interactive language programs, videos, and the Internet will be used.

## General Studies

**GS 100 General Studies Seminar** **1-0-1**
This course will assist General Studies majors in identifying and planning academic and professional goals. Sessions will include advising, guest speakers, and in-class writing. This course is required for all General Studies and Associate in Arts majors except for those enrolled in GS 102 Study Strategies or for those planning to apply for experiential learning credit (see GS 101 below). *Please see the General Studies department head for the Waiver Policy for this course.*

**GS 101 Assessment of Prior Learning** **1-0-1**
This course, required for all General Studies majors who wish to apply for experiential learning credit, will assist the student in defining career objectives and preparing proposals for experiential learning credit. It will include advising and in-class writing sessions.

**GS 102 Study Strategies** **2-0-2**
Through the presentation of topics ranging from reading and study strategies to stress management, students become better equipped to adjust to the college experience and increase their chances of academic success. Individual periodic conferencing is also a key element of the course. It is open to all students and required for some AGS students. Waivers from GS 102 can be granted for students transferring two or more college level classes with grades of B- or better. GS 102 may *not* be taken as an elective to meet graduation requirements.

**GS 104 Study Strategies Seminar** **1-0-1**
Designed for students who were required to take GS 102 and whose cumulative GPA is 2.69 or below after the first semester. Study Strategies Seminar provides students opportunities to further develop and apply college success strategies to their second-semester courses while maintaining contact with their academic advisor through frequent conferencing. GS 104 may *not* be taken as an elective to meet graduation requirements. (Prerequisite: GS 102)

## Geography

**GY 135 Destination Travel Geography I** **3-0-3**
This course examines the tourist destinations in the Western Hemisphere (North America, Latin America, South America, Caribbean). A comprehensive look at the major characteristics of the geographical location, climate, cultural and social aspects of the area. Students will also look at the sales opportunities for the destinations in these regions.

**GY 137 Destination Travel Geography II** **3-0-3**
This course examines the tourist destinations in the Eastern Hemisphere (Europe, Africa, Middle East, Asia, Pacific). A comprehensive look at the major characteristics of the geographical location, climate, cultural and social aspects of the area. Students will also look at the sales opportunities for the destinations in these regions.

## Gerontology

**GE 101 Dimensions of Aging** **4-0-4**
This course explores aging from the biological, psychosocial and environmental perspective. Focus will be on the individual's attitudes, skills and knowledge needed to work effectively with the elderly.

**GE 120 Elderly and the Community** **3-0-3**
An introduction to the world of the elderly, exploring the various community settings, social agencies, businesses, educational institutions and neighborhoods that impact upon them. Students will be made aware of service delivery models for the elderly and be introduced to instruments to evaluate them.

**GE 130 Public Policy and Aging** **3-0-3**
This course provides an understanding of the national and state legislation and regulations as they impact upon the elderly; evaluates changing health care legislation and policies; identifies appropriate advocacy and assisting agencies; and suggests how the elderly can influence public policy in aging.

**GE 140 Biological Aspects of Aging** **3-0-3**
A foundation course to assist the student to become more knowledgeable concerning the normal physical aspects of aging, how that affects an independent life style for an aging person, and how to develop situations to enrich and enhance that independent life style. (Prerequisite: GE 101 or permission of department head of General Studies)

**GE 150 Gerontology: Current Topics** **3-0-3**
Designed to provide the most current in-depth approach to selected current topics in the field. Topics could vary but may include any of the following: advocacy; communication; burnout; ethical issues; job opportunities in working with the elderly; policies of aging; substance abuse; mental health; counseling; group dynamics; power. (Prerequisite: GE 101 or permission of department head of Human Service)

## Health Science

**HS 101 Medical Terminology** **3-0-3**
A course designed to promote an understanding of the proper use, spelling, pronunciation and meaning of medical terms. This course emphasizes learner participation through group activities and reading assignments. Basic anatomy and physiology and common pathology of the body systems will also be discussed. Designed for people working in the health care environment.

**HS 104 Health Care Data Content and Delivery Systems** **3-0-3**
This course will introduce the generic components of the content, use and structure of health care data and data sets, how these components relate to primary and secondary record systems and to introduce legal and ethical issues applicable to health information. Discussions will include health record content, documentation requirements comparing the various regulatory agency requirements and introduction to payment and reimbursement systems. The organization, financing and delivery of health care services in both the hospital and the medical office practice will also be discussed.

**HS 112 Basic ICD-9-CM** **2-0-2**
Introduction to basic ICD-9-CM coding concepts, nomenclature and classification systems and 3-M computerized encoding system. Application of basic ICD-9-CM principals in assigning valid diagnostic and procedural codes. "Official Inpatient Coding Guidelines" developed by the AHA (American Hospital Association) are utilized to accurately sequence principal diagnosis and procedure and other secondary diagnoses. (Prerequisites: HS 101, BI 120, BI 122 and HS 104)

**HS 113 Intermediate ICD-9-CM** **4-0-4**
Higher level ICD-9-CM inpatient coding, expanding on and further applying concepts learned in Basic ICD-9-CM, including expanded use of 3-M computerized encoder system. Discussion of inpatient reimbursement and payment systems used including prospective payment system, managed care and other third party payers. During the last 5 weeks of the course, the student will use actual medical records in a simulated professional practice experience applying codes and calculating DRG utilizing the computerized encoder. (Prerequisite: HS 112)

**HS 114 Basic Ambulatory Coding** **2-0-2**
Introduction to basic CPT-HCPCS coding concepts utilizing AHA "Official Outpatient Coding Guidelines." ICD-9-CM coding will also be utilized as it relates to ambulatory coding concepts. Introduction to use of computerized encoding in the ambulatory setting. (Prerequisites: HS 112 and HS 113)

**HS 115 Intermediate Ambulatory Coding** **4-0-4**
Higher level CPT-HSPCS coding expanding on and further applying concepts learned in Basic CPT-HSPCS, including expanded use of 3-M computerized encoder system. Discussion of ambulatory reimbursement and payment systems used including prospective payment system, managed care, other third party payers and a discussion of regulatory compliance issues. During the last 5 weeks of the course, the student will use actual medical records in a simulated professional practice experience applying codes and calculating APC utilizing the computerized encoder. (Prerequisite: HS 114)

## History

**HI 104 Western Civilization: Antiquity to 1650** **3-0-3**
This is the first of a two-course sequence about Western civilization. Study of history addresses the goals of being an educated person by liberating the learner from a narrowed perspective. Thinking about and understanding the past clearly provides for better alternatives in the present and the future. This course provides opportunities to learn about major historical events and trends from the earliest civilizations up to the Reformation which have shaped the past, present and will impact on the future. Social, political, intellectual and economic changes will be among the topics explored, as will critical scrutiny of Western tradition.

**HI 105 Western Civilization: 1650 to present** **3-0-3**
Study of history addresses the goals of being an educated person by liberating the learner from a narrowed perspective. Thinking about and understanding the past clearly, provides for better alternatives in the present and future. This course provides opportunities to learn about major historical events and trends since the mid fifteenth century which have shaped the past, present and will impact on the future. Social, political, intellectual and economic changes will be among the topics explored, as will critical scrutiny of Western tradition.

**HI 120 United States History: to 1870** **3-0-3**
This is a course that explores the critical historical events that have interacted to shape life in this country from its discovery until 1870. Included will be the discovery of America; colonization; social, political and economic development; the American Revolution; political documents which establish our form of government (Declaration of Independence/Constitution); slavery, the Civil War; and Reconstruction. Major topics are emphasized within a chronological framework and serve as a systematic introduction to United States History prior to 1870.

**HI 121 United States History: 1870 - present** **3-0-3**
A course which explores the critical historic events and forces that have interacted to shape life in the U.S. Topics will include: the Industrial Revolution, World Wars, the Cold War, the role of the U.S. as a world power, social revolutions, the Great Depression, and the workings of democracy within the republic.

**HI 131 World History I: to 1500** **3-0-3**
This course examines the histories of civilizations in Asia, Africa, Europe and the Americas from the earliest times to 1500. The interrelationships among these societies, and their political, social, economic, religious and cultural features will be explored.

**HI 132 World History II: 1500 - present** **3-0-3**
This course examines the histories of civilizations in Asia, Africa, Europe and the Americas from 1500 to present. The interrelationships among these societies, and their political, social, economic, religious and cultural features will be explored.

**HI 221 New Hampshire History** **3-0-3**
New Hampshire History is a general survey of New Hampshire's past, from prehistoric periods to the present. The course will be chronological in nature, with emphasis on certain key topics such as immigration and ethnicity, rural development, urban and industrial growth, tourism, environmental changes, and the evolution of government. Students will not simply be exposed to major events and personalities in New Hampshire history, but they will explore ways that people removed from us in time have made their living upon the land we call New Hampshire. In addition, students will use state and local resources to better understand the very nature of history and ways that the study of history provides a better appreciation of ourselves and the world in which we live.

## Hotel Administration

**HR 110 Introduction to Hotel Operations** **3-0-3**
This course is designed to give an overview of the working components of a hotel and their interrelationships. Students will explore in a descriptive fashion the responsibilities of each hotel department and how and why their interactions are important. Students will examine the difference in operations of various types and sizes of hotels from B&B to full service hotels.

**HR 225 Front Office Operations** **3-0-3**
A comprehensive study of the front desk operations from a small inn to a full-service hotel. The student will explore front and back office systems. Topics include reservation procedures, registration, auditing, tour groups and check out procedures, room control, maintenance on guest accounts, public relations and sales.

**HR 227 Legal Issues for the Hospitality Industry** **3-0-3**
Students will review theory and the application of general and contract law as they relate to business regulations. A further study of the legal procedures as they apply to the statutes and common law governing innkeeper's liability. Students will also learn the legal issues as they relate to the travel and tourism industry. Additional topics include: disclaimer of liability, safe keeping facilities, guests' rights, personnel issues and other hospitality related issues.

**HR 229 Hotel Management and Operations** **3-0-3**
This course examines a variety of hotel operations and property management issues. Other topics include facilities management for both large and small hotel, concierge, housekeeping and restaurant operation management. Students will also explore effective customer relations in a hospitality atmosphere

**HR 245 Event, Meeting and Convention Planning** **3-0-3**
This course gives students the experience in developing an event, meeting and/or conference program. Students will go through the step-by-step process of pre-planning, budget/agenda preparation, and marketing the event. Other topics include sales, negotiations and contracts. Students will complete a portfolio to include an agenda, floor plan, budget and brochure.

**HR 260 Hospitality Sales and Marketing** **3-0-3**
This course focuses on the hospitality markets and products. The student will analyze the organization of the hotel sales and marketing department by looking at the importance of increasing revenue through special market segment, planning itineraries with tour operators, brochure design and advertisement. (Prerequisite: BU 170 or permission of department head of Hotel Administration)

**HR 269 Food and Beverage Management** **3-0-3**
Students will examine the financial relationship of the food and beverage aspect of the hotel industry. Topics covered are: marketing, food purchase controls, production, service, management of bar and beverage, sales techniques and sanitation.

**HR 290 Hotel Internship** **0-9-3**
The internship offers the opportunity to put learned theory to practical application in a supervised work environment. Students are required to complete a minimum of 90 hours and complete a portfolio on the internship. Periodic conferences between the site supervisor and the NHTI internship coordinators are scheduled to monitor and evaluate student progress. This course is limited to seniors and requires the permission of the Department Head. (Prerequisite: 2.5 GPA in major field courses and permission of department head of Hotel Administration)

**HR 293 Senior Hospitality Seminar** **2-0-2**
This course addresses current issues in the hospitality/tourism industry through discussion, reports (oral and written) and professional literature. Students will examine business ethics, professional development and case studies. Additional topics include resume preparation and interviewing techniques. Students will complete a portfolio.

## Human Service

**HU 103 Introduction to Practicum Experience** **1-0-1**
A course designed to introduce and familiarize the student with Human Service Practicum Procedure and Protocol. Special skills needed in Human Service work will also be reviewed including: Record keeping; Interviewing Skills; Preparation of Practicum Portfolio and Resume; and Writing Competency Goals and Objectives.

**HU 111 Introduction to Human Service** **3-0-3**
An introductory course identifying the programs and activities of social and human service. Focuses on the practical problems facing the human service/mental health worker and examines the attitudes and objectives to be attained.

**HU 193 Human Service Practicum I*** **2-10-5**
The student will work in an approved clinical setting under the supervision of an approved professional. Periodic conferences between the supervisor and faculty member are planned in order to evaluate the student's progress. At the close of the semester, the student will submit documentation relating theory to practice in the chosen field of experience. *Only for students who matriculated prior to and including January 2004.* (Prerequisites: HU 103, HU 111 and MH 185 with a combined major field GPA of 2.0. For matriculated students ONLY!)

**HU 195 Human Service Practicum I*** **2-8-4**
The student will work in an approved human service setting under the supervision of an approved professional. Periodic conferences between the Supervisor and Practicum Coordinator are planned in order to evaluate the student's progress. At the close of the semester, the student will submit documentation of the practicum activities/experience and demonstrate the ability to relate theory to practice in the chosen field of experience. The student will complete a total of 125 hours of field experience. (Prerequisites: HU 103, HU 111, HU 221 and MH 187)

**HU 221 Social and Professional Issues in Today's Society** **3-0-3**
The student will examine and explore a variety of social and professional issues in today's society relating to the helping field. Skill and knowledge-based topics necessary for the success of the student's career in today's workplace may include basic human needs in homelessness, poverty, advocacy work, grant writing/proposals/funding, culturally competent counselor standards and community mental health delivery systems, as well as professional issues and skills that face today's helping professional.

**HU 242 Ethics and the Professional Helper** **3-0-3**
A case related study of the ethical principles determining the standards of practice in the Human Service Field including Mental Health and Addiction Counseling. This course is reserved for the practitioner. Topics taken from the related national code of ethics will be discussed. The issues presented will be role-played and resolved according to universal philosophical principles. Philosophy as the foundation of professional practice guides this course. It will meet professional requirements for ethical training.

**HU 295 Human Service Practicum II*** **2-10-5**
A continuation of HU 193, Practicum I. *Only for students who matriculated prior to and including January 2004.* (Prerequisite: HU 193)

**HU 296 Human Service Practicum III*** **2-10-5**
A continuation of HU 295, Practicum II. *Only for students who matriculated prior to and including January 2004.* (Prerequisites: HU 295, PY 210 and PY 283.)

**HU 298 Human Service Practicum II*** **2-8-4**
The student will continue their field experience work in an approved human service setting under the supervision of an approved professional. Skills, knowledge and personal characteristics are built upon and integrated into the learning and supervision of this course, as well as second year coursework including ethics, individual counseling and conflict resolution. Periodic conferences between the Supervisor and Practicum Coordinator are planned in order to evaluate the student's progress. At the close of the semester, the student will submit documentation of the practicum activities/experience and demonstrate the ability to relate theory to practice in the chosen field of experience. The student will complete a total of 125 hours of field experience. (Prerequisites: HU 103, HU 111, HU 221, HU 242, HU 193 and MH 187)

* The student will also complete an interview with the practicum coordinator the semester prior to the first scheduled practicum. Special requests regarding practicum entrance may be brought to the department head by the student. Review of the requests will be made by the department faculty and special exemptions may be made for entrance into the practicum.

## Information Technology

**IT 102 PC Applications** **3-0-3**
The course introduces students to desktop applications with an emphasis on topics from a user perspective. Topics include use of: an operating system, a word processor, a spreadsheet, presentation software, Internet and hardware and software considerations.

**IT 108 Personal Computer Hardware and Software** **2-2-3**
The focus of this course is to prepare IT and Engineering Technology students for future computer courses. Discussion topics include the use of operating systems and current office application software along with an overview of computer history, terminology, hardware and software development. The lab component offers hands-on training in the use of Windows, MS-DOS, application software (word processing, spreadsheet, database and presentations software) and the Internet.

**IT 106 IT Career Topics** **2-0-1**
This course is a series of presentation and panel discussions by experts and leaders in the field on the important topics in Information Technology careers. It provides information which helps students plan their college

work and anticipate how they will apply it in subsequent professional positions. *Students with two years or more of work experience in the computer field may request a waiver from the course.*

**IT 110 Programming Fundamentals** **2-2-3**
This lab-focused course introduces the fundamental skills and knowledge of computer programming for business solutions. Students encounter and resolve a range of programming problems learning the techniques of design, structured coding, debugging, error-handling and troubleshooting. The work begins with procedural syntax and concludes with the foundations of object-oriented programming, creating classes and objects. Topics include problem analysis, computer logic and flow control, decision and repetition structures, argument passing, program documentation, class definitions and use of a debugger and help/documentation resources. (Prerequisite: IT 108)

**IT 140 Database Design and Management** **2-2-3**
This course is the first in a two-part sequence on relational database. Topics include: Structured Query Language (SQL), database design, terminology and the creation of tables, forms, queries, reports and macros. The lab component will include the development of business applications using a relational database. (Prerequisite: IT 102 or IT 108)

**IT 150 Introduction to Networking** **2-2-3**
This course will provide students with classroom and lab experience in current and emerging networking technologies. Instruction includes but is not limited to an introduction to networking fundamentals including networking standards organizations, networking terminology and protocols used in local and wide area networks, OSI Model, Internetworking Devices, IP Addressing, LAN Media & Topologies, Structured Cabling and use of test equipment. (Prerequisite: IT 108)

**IT 180 Introduction to Unix Operating Systems** **2-2-3**
The focus of this course is an in-depth look at operating systems. Topics include file management, memory management, security, system processes, printing, backing up/restoring and network basics. An emphasis of the course will be discussing the differences between the major operating systems and their applicability to different business needs. The lab component will exclusively use the LINUX operating system exposing the student to all basic UNIX commands. (Prerequisite: IT 108)

**IT 200 Spreadsheets** **3-0-3**
This course provides training in introductory and advanced topics related to spreadsheet creation, formatting and printing. Topics include row and column operations, formula creation (including functions), graph creation and printing, database management techniques, and macro design and execution. (Prerequisite: IT 102)

**IT 202 Database Concepts Using Access** **3-0-3**
This course provides instruction in introductory database creation, from a user's point of view, using Microsoft Access. Topics include: table design and relationships, use of queries for extracting data, layout and formatting of forms and reports, optimum database design techniques and macro design and execution. (Prerequisites: IT 102 or IT 108)

**IT 210 Object Oriented Programming in Java** **2-2-3**
This course builds on the work done in IT 110. It develops the constructs and concepts of object-oriented programming: problem conceptualization, class definition, object instantiation, method definition and invocation, the principles and practices of reuse, inheritance and polymorphism. It also introduces graphical user interfaces and event-driven programming. (Prerequisite: IT 110)

**IT 212 Visual Basic.NET** **2-2-3**
This course will introduce students to object-oriented and event-driven programming. The emphasis of the course will be towards building business solutions. Topics will include: forms, events, properties, syntax, file processing, and error handling. The lab component will include developing business applications. (Prerequisite: IT 108)

**IT 214 Advanced Visual Basic.NET** **2-2-3**
This course is a continuation of IT 212 Visual Basic.NET, examining more advanced topics such as arrays, collections, error handling, classes/objects, ActiveX technology, and invoking the Window API's. A hands-on lab component will include developing business applications. (Prerequisite: IT 212)

**IT 220 Technical Support Tools and Skills** **2-2-3**
Begins with an overview of the Technical Support function, organization and workflow. It then works through skills and tools including communication and interpersonal effectiveness, incident tracking, prioritization escalation and resolution, call handling applications, user documentation, diagnostic scripts and system imaging. The lab component will include field trips, practice with call handling software, role-playing and writing. (Prerequisites: IT 106, IT 108, IT 110, IT 140 and IT 150)

**IT 240 Database Implementation** **2-2-3**
This course is the second in a two-part sequence on relational database. Topics include: client/server application development, Structured Query Language (SQL), Extensible Markup Language (XML) and database design. The lab component will include the development of business applications using a relational database. Discussion of ASP.NET as a development tool will be included. (Prerequisites: IT 140 and IT 212)

**IT 250 Networking Theory I** **2-2-3**
This course is a continuation of Introduction to Networking, with increased focus on the installation and configuration of local and wide area networks. Topics include planning and implementing IP Addressing schemes, troubleshooting and maintaining WANs and LANs, analyzing connection-oriented and connectionless network services and identifying and configuring various network routing protocols.
(Prerequisite: IT 150)

**IT 252 Networking Theory II** **2-2-3**
This course is a continuation of Networking Theory I, examining additional networking topics and technologies such as LAN segmentation utilizing bridges, routers and switches, spanning tree, fast Ethernet, and virtual local area networks. Wide Area Network services such as frame relay, ISDN, LAPB and PPP are covered. Students will configure routers, switches and PCs to design and build networks in the lab portion of this class. (Prerequisites: IT 150 and IT 250)

**IT 254 Advanced Routing** **2-2-3**
This course is a continuation of Networking Theory II, examining advanced Router Concepts and configurations. Students will install, configure, operate and troubleshoot complex WAN networks. Topics will include more advanced Frame Relay networks, dial Access services and distance-vector versus link-state routing protocols. Advanced Router Access Control Lists for blocking unauthorized access to private networks will also be covered. (Prerequisite: IT 252)

**IT 256 Remote Access** **2-2-3**
This course examines advanced LAN switching concepts including Virtual Local Area Network (VLANS) and Internetwork troubleshooting. Students will configure layer 3 and 4 constraints on switches to implement various levels of security and separation on top of basic VLANS. Internetwork troubleshooting will include all seven layers of the OSI model from the application down to the physical layer cabling. Students will be expected to design, configure and troubleshoot complex WANs and LANs. (Prerequisite: IT 252)

**IT 258 Advanced Switching** **3-2-4**
This course builds upon Networking Theory II, examining advanced LAN switching concepts including Virtual Local Area Networks (VLANS) and Internetwork troubleshooting. Students will configure layer 3 and 4 constraints on switches to implement various levels of security and separation on top of basic VLANS. (Prerequisite: IT 252)

**IT 260 Advanced Networking Design and Troubleshooting** **3-2-4**
In this class students will be expected to design, build and troubleshoot complex Local and Wide area networks incorporating the knowledge gained form the previous networking courses. Internetwork troubleshooting will include all seven layers of the OSI model from the application layer down to the physical layer cabling. (Prerequisites: IT 254, IT 256 and IT 258)

**IT 262 Network Security I** **2-2-3**
This course is designed to give students the skills needed to identify and resolve network security issues. The course will provide students an introduction to firewalls and other network security components that can be used to work together to create an in-depth defensive perimeter around a Local Area Network (LAN). Students will learn how to: identify threats; plan and design firewalls; develop a security policy; configure routers, workstations, servers, switches and firewall equipment for various packet filtering and security measures; create user authentication policies and methods; design and set up Virtual Private Networks (VNP); maintain and troubleshoot these systems. (Prerequisite: IT 150 and IT 250)

**IT 270 Web Design and Development I** **2-2-3**
Fundamentals of graphic design, as applied to the web, are discussed and web sites created using an HTML web authoring tool. Topics include: web site planning and testing; web page layout; proper navigation; use of color and images; web hosting; publishing to a server; promoting web sites; web site accessibility; and legal issues in web design. Participants reinforce their web design skills through the design, development and publishing of their own web site design project. (Prerequisite: IT 102 or IT 108)

**IT 272 Web Design and Development II** **2-2-3**
This course builds on the skills developed in Web Design and Development I with emphasis on advanced techniques that create animation, interactivity and the use of audio. During the class, students plan the "story" of their project and then use the techniques learned in class exercises to create an animated site with audio effects. Other topics include: creating vector graphics; drop down menus; and publishing multimedia sites. (Prerequisite: IT 270)

**IT 280 Windows Server Operating Systems** **2-2-3**
The focus of this course is on the use of network operating systems in a business environment. Topics include business analysis, matching systems needs within appropriate network configuration, data and systems security measures for user groups sharing files and resources, print services, network interconnectivity and related network management issues. (Prerequisite: IT 108)

**IT 274 Internet (Electronic) Commerce** **2-2-3**
In this course, students are introduced to both the business and technical aspects of Internet (Electronic) Commerce. Included are: developing an e-commerce business strategy, identifying and prioritizing business processes for electronic commerce, evaluating internal versus outsourcing of electronic commerce, marketing on the Internet and measuring the results of electronic commerce initiatives, electronic commerce site servers, automated exchange of business information between an organization and its business partners, security considerations, and developing an organization's "Digital Nervous System" to exploit the advantages of electronic commerce. Web Team Project work is used to simulate an electronic commerce implementation environment and an implementation plan is created. (Prerequisite: IT 102 or IT 108 or permission of the department head of Information Technology)

**IT 290 Managing Information Systems** **2-2-3**
The role of information as a resource for all types of organizations is the major focus in this course. The concept of the "Digital Firm," information use in the organization, E-Commerce, IT infrastructure and security of IT systems are some of the topics covered. The tools and techniques of project management and their role in information systems development are also discussed and practiced. Role playing and customer service exercises are used to simulate typical interactions between information technology professionals and the customers they support across the organization. (Prerequisites: IT 108 and IT 110)

**IT 292 Senior IT Project Preparation** **1-0-1**
This course is designed to define the work that will be performed in IT 292 Senior IT Project. Selection of a project will be made with the approval of the instructor and project sponsor. Students will meet with a project sponsor and instructor for the scope of work to be completed. (Prerequisites: IT 110 and IT 140)

**IT 294 Senior IT Project** **1-4-3**
Capstone course for the Information Technology curriculum providing application of skills acquired to the development of computerized information systems. Students test their ability to organize and interpret data, develop and apply programmed solutions to problems and submit thorough documentation of the task. (Prerequisites: IT 140 and IT 290)

## Landscape Design

**LD 101 Plant Materials I** **3-0-3**
Explores a select group of hardy ornamental plant materials, emphasizing evergreen and deciduous focal, intermediate and overstory trees. Landscape characteristics of individual plants will be stressed as they relate to landscape design values. Basic plant identification is developed.

**LD 102 Plant Materials II** **3-0-3**
Explores hardy evergreen and deciduous shrubs, ground covers and vines. Basic plant identification is developed and positive design characteristics of individual plants is presented.

**LD 109 Landscape Surveying** **2-2-3**
A course to familiarize students with the equipment, procedures and methodology of modern surveying practices. It includes measurement of distance, elevation, angles and direction in the field as well as office computations for transverses and the description of parcels of land. The methods of topographical surveying and mapping, construction surveying and route location surveying for vertical and horizontal control are also studied. (Prerequisites: high school Algebra I **and** Algebra II with grades of "C" or higher **or** NHTI's MT 108 and MT 109 both with grades of "C" or higher)

**LD 112 Landscape Architectural Drafting and Sketching** **2-2-3**
The first semester of drafting is devoted to the basic mechanics of representing ideas graphically. Drafting equipment is selected and its proper use taught. Architectural lettering styles, drafting techniques, geometric construction, projection principles and drawing expression are the areas of early construction. Design considerations toward residential planning and layout are studied for development of working plans and details. Light construction methods are taught for developing framing plans and basic structural calculations.

**LD 115 Landscape Architectural Design Theory** **3-0-3**
This course introduces the student to the field of landscaping architecture. Lectures, reading and problem-solving exercises provide a basic overview of historical, philosophical and technical aspects of the profession of landscaping architecture. The course will also explore how design, site environment and legislation affect the design process.

**LD 117 Small Scale Design Project** **2-2-3**
A studio project involving a real site to develop techniques of site analysis, client interview and program development of a base sheet from field measurements and designing a site plan that corresponds to the client's needs, site conditions, human scale, and environmental contexts. Also included is the development of site details for decks, patios, pool, fences, and site furniture. (Prerequisites: LD 102, LD 109 and LD 112)

**LD 120 Planting Design** **3-0-3**
Lecture includes the combination of landscape elements when used with architectural, aesthetic, engineering, and climate control uses of plants. Students work in graphics skills and develop the ability to produce professional quality plans. (Prerequisites: LD 102 and LD 112)

**LD 125 Landscape Construction Details and Methods** **3-0-3**
A survey of the materials used in landscape construction, the methods used in assembling the materials into the landscape and the forces acting on the structures. Included are the characteristics and properties of each of the landscape materials and the relative costs of the materials and the installation. Landscape materials and methods to be studied include site work, various paving materials, various structural materials, and site drainage materials. The student will learn how to read the plans and also prepare plans showing construction details including: walls, walkways, wooden structures and water features. (Prerequisite: LD 112)

## Learning Support

Individualized learning support courses for students needing structured guidance including tutoring, application of study skills, and instruction in time management strategies. Must be taken in conjunction with at least one course. Students complete contracts addressing their individual needs.

Students who benefit include those with learning differences and other disabilities; students with attentional and organizational needs; students who are returning to school after a long absence; and students who are under prepared for the rigors of college work.

May not be taken as electives to meet graduation requirements. Permission of the Disabilities Coordinator or LC Director is required. ***These courses are not eligible for financial aid.***

**LC 111 Learning Skills Support** **1-0-1**
Students complete individual contracts consisting of a total of 15 contact hours. Students must register for LC 111 by Week 7 of the semester.

**LC 112 Specialized Learning Support** **2-0-2**
Designed for students who require additional academic guidance formally built into their schedules. Students complete individual contracts consisting of a total of 30 contact hours. Students must register for LC 112 by Week 4 of the semester.

**LC 113 Intensive Learning Support** **3-0-3**
For those who need significantly more time than the typical one to two hours of independent work required for each hour of class time. Others who have not demonstrated successful progress in the past will focus upon determining the reasons for lack of success, such as poor fit with program, personal goals, need for additional structure, or formal support. Students complete individual contracts consisting of a total of 45 contact hours. Students must register for LC 113 by Week 3 of the semester.

## Manufacturing Engineering Technology

**MF 111 Manufacturing and Materials Processing** **3-2-4**
The course is designed to provide a basic understanding of traditional methods of materials processing used in product manufacturing. Through lectures, demonstrations, and firsthand laboratory exposure, the student is given the theory and applications of each process. The following are covered: casting, extruding, forging, molding, forming, heat treating, joining, and an introduction to machining methods, both conventional and numerically controlled.

**MF 202 Measurement and Control** **3-2-4**
The course begins with the study of basic electronics (analog and digital) and electronic components (transistors, op-amps, SCR's). Electromechanical principles are introduced, leading to consideration of sensors and transducers used in production processes. Paralleling this sequence is the development of programming in Visual Basic. These two paths join during the second half of the course where programming logic controllers (PLC's) and relay ladder logic (RLL) are presented. In the laboratory, students gain hands-on experience with all hardware and software covered in the course. (Prerequisites: IT 102, PH 135 (or basic AC/DC theory))

**MF 220 Manufacturing Processes and Machine Tools** **3-3-4**
A technical study of the theory, equipment and application of machine tool and metal removal processes. In addition to understanding machining methods, the economics and comparison between machining methods are stressed. Processes covered are turning, milling, drilling, broaching, abrasive machining, finishing, numerical control as well as electrical and chemical machining. Theory is applied through actual machine operation in laboratory. (Prerequisites: EN 125, MF 111 and MC 102)

**MF 230 Production Systems** **3-2-4**
A study of the organization of the production system as well as the techniques used to control its operation. Topics covered include production planning, plant layout, inventory control, work measurement, job sequencing, and operation scheduling. The laboratory sessions will apply the techniques studied through a series of integrated projects which develop the use of traditional as well as computer-aided methods. (Prerequisites: MF 111 and IT 102)

**MF 241 Computer Integrated Manufacturing (CIM)** **3-3-4**
A study of flexible industrial automation as it applies to product-producing industry. Particular emphasis is on robotics, numerical control and computer integrated manufacturing. The basic theory and application of these areas are studied. In the laboratory portion of the course, the student has the opportunity to set up, program, and operate all aspects of a computer-controlled manufacturing system. Programmable logic controllers, vision systems, and a variety of robotic devices and CAM capabilities are included. (Prerequisites: MF 202, MF 220 and IT 102)

**MF 252 Quality Control** **3-2-4**
A study of the techniques used to collect, organize and analyze information which can be used in making decisions regarding quality. The course will begin with the basic principles of statistics and probability and will then develop such topics as process capability, process control, acceptance sampling and reliability. The scope of quality will be expanded to include such topics as reliability, quality costs, product liability and quality systems. The laboratory sessions will provide the student with the opportunity to apply the principles developed in the classroom through the use of computer examples and "hands-on" exercises. (Prerequisites: MT 133 and IT 102)

## Mathematics

**MT 103 Algebra I - Part I** **4-0-4**
The first in a sequence of preparatory courses for students planning to major in health sciences, business, or computer information systems. Topics will include: fractions, decimals, percents, linear equations and inequalities, polynomials, exponents, graphing, applications of algebra. *The four institutional credits awarded for this course do not count toward graduation requirements but are calculated into GPA.* Completion of this course with a grade of "C" or higher and MT 104 with a grade of "C" or higher will satisfy the math prerequisite for MT 123.

**MT 104 Algebra I - Part II** **4-0-4**
The second in a sequence of preparatory courses for students planning to major in: health sciences, business, or computer information systems. Topics will include: rational expressions, systems of linear equations, radical expressions, quadratic equations, applications of algebra. *The four institutional credits awarded for this course do not count toward graduation require-*

*ments but are calculated into GPA.* (Prerequisite: NHTI's MT 103 with a grade of "C" or higher or recommendation by Math department based on NHTI Assessment Testing)

**MT 108 Introductory Technical Mathematics I 5-0-5**
The first in a sequence of preparatory courses for students planning to major in the engineering technologies. Topics will include: fractions, decimals, percents, exponents, operations with signed numbers, introduction to algebra, linear equations, factoring, graphing, elementary geometric concepts and formulas. *The five institutional credits awarded for this course do not count toward graduation requirements but are calculated into GPA.* Completion of this course with a grade of "C" or higher and MT 109 with a grade of "C" or higher will satisfy the math prerequisite for MT 133.

**MT 109 Introductory Technical Mathematics II 5-0-5**
The second in a sequence of preparatory courses for students planning to major in the engineering technologies. Topics will include: quadratic equations, logarithms, graphing of functions, systems of linear equations, radicals, Pythagorean theorem, similar figures, elementary trigonometry. A graphing calculator* will be required. *The five institutional credits awarded for this course do not count toward graduation requirements but are calculated into GPA.* Completion of this course with a grade of "C" or higher and MT 108 with a grade of "C" or higher will satisfy the math prerequisite for MT 133.

**MT 111 Pre-Algebra 5-0-5**
This course will review the essential math skills required for success in an elementary algebra course. Topics will include: basic arithmetic operations with whole numbers, decimals, fractions, signed numbers, percent, ratio and proportion, systems of measurement and conversions, introduction to basic algebra and geometry. *The five institutional credits awarded for this course do not count toward graduation requirements but are calculated into GPA.*

**MT 113 Accelerated Introductory Mathematics 6-0-6**
This course is designed for those students who are starting engineering technology or information technology programs and need a review of high school algebra, algebra II, or geometry. Topics include: introduction to algebra, solutions of linear equations, factoring algebraic fractions, exponents, quadratic equations, properties of logarithms, basic concepts of geometry including the Pythagorean theorem, similar figures and solid geometry, trigonometry. A graphing calculator* will be required. *The six institutional credits awarded for this course do not count toward graduation requirements but are calculated into GPA.* Completion of this course with a grade "C" or higher will satisfy the math prerequisite for MT 133. (Prerequisite: high school Algebra I)

**MT 115 Practical Mathematics in Electronic Technology 4-1-1**
This course is designed to reinforce basic mathematical concepts and introduce terminology and problem solving with applications employed in Engineering Technology to students planning to enter the Electronic and Computer Engineering Technology and Broadband Networking and Communications Technology curriculums. Topics covered include: engineering notation; precision and accuracy of numbers; use of the TI-86 calculator and order of operations; solution of literal equations; units of measure; and conversion within and between systems of units. Also included are: an introduction to basic electric circuits; component identification; and measurement techniques. Exercises and laboratory experiments will concentrate on developing methods of analysis employed in problem solving. Emphasis is placed on terminology and development of methods and analytical skills applied in engineering technologies. Theory will be reinforced through laboratory experiments. *(The institutional credit awarded for this course does not count toward graduation requirements but is calculated into GPA; grading will be Pass/Fail.)*

**MT 120 Contemporary College Mathematics 4-0-4**
A course in mathematical problem solving. Students will use basic math skills and technology as they become actively involved in solving applied problems from the topics of measurement, algebra, geometry, data analysis, finance, probability, statistics and topics related to the students' major field. Career and life skills will be emphasized. (Prerequisite: NHTI's MT 103 with a grade of "C" or higher ***or*** the high school equivalent with a grade of "C" or higher)

**MT 123 Intermediate Algebra 4-0-4**
Topics include: real numbers, linear equations and inequalities, graphs of linear equations, systems of linear equations, exponents, polynomials, quadratic (and higher degree) equations, rational expressions, roots and radicals, exponential and logarithmic functions, sequences and series. A graphing calculator* will be required. (Prerequisite: High school algebra I with a grade of "C" or higher ***or*** NHTI's MT 103 ***and*** MT 104, both with grades of "C" or higher)

**MT 125 Finite Mathematics 4-0-4**
Topics include: matrices, linear programming, counting techniques, sets, probability, statistics, mathematics of finance, logic, Markov chains, game theory. Applications will be emphasized. A graphing calculator* will be required. (Prerequisite: MT 123)

**MT 129 Math for Allied Health 3-0-3**
This course is designed for students in the allied health fields. Topics covered will include: basic arithmetic operations; basic topics from geometry; conversion of units; dosage calculations; linear functions, statistics and probability as they relate to the study of health data; inductive and deductive reasoning for the purpose of drawing valid conclusions. (Prerequisite: High school Algebra I with a grade of "C" or better OR NHTI's MT 103 *and* MT 104 with grades of "C" or better)

**MT 133 Elementary Functions 5-0-5**
Topics will include: algebraic concepts and operations; linear, quadratic and trigonometric functions; vectors; systems of linear equations; exponential and logarithmic functions; and ratios, proportion and variation. A graphing calculator* will be required. (Prerequisite: prior knowledge of algebra I, algebra II and geometry is assumed)

**MT 134 Pre-Calculus 4-0-4**
Topics will include: complex numbers; trigonometric identities and equations; polynomial and rational functions; conic sections; non-linear systems; non-linear inequalities; sequences and series; limits and continuity; and probability and statistics. A graphing calculator* will be required. (Prerequisite: MT 133)

**MT 205 Calculus I 4-0-4**
This course in the calculus of one variable will include: limits; derivatives of algebraic, trigonometric, exponential and logarithmic functions; antiderivatives; and an introduction to integration. Applications will be stressed throughout the course including: velocity, acceleration, curve sketching, optimization and related rates. A graphing calculator* will be required. (Prerequisite: MT 134)

**MT 206 Calculus II 4-0-4**
Topics will include: indefinite integration; the definite integral the Fundamental Theorem of Calculus; integrals of elementary transcendental functions; techniques of integration; polar coordinates; and power series including Taylor series. Applications will be stressed throughout the course including: area; volumes of revolution; centroids; and moments of inertia. A graphing calculator* will be required. (Prerequisite: MT 205)

**MT 251 Statistics 4-0-4**
Topics include: basic measurements of central tendency and variability; frequency distributions; probability; binomial, Poisson, and normal distributions; sampling distributions; estimation of parameters; hypothesis testing; simple and multiple regression; correlation. A graphing calculator* will be required. (Prerequisite: MT 123)

** A Texas Instruments model TI-83+ is required for MT 109, MT 113, MT 123, MT 125, MT 133, MT 134, MT 205,* MT 206 and MT 251.

## Mechanical Engineering Technology

**MC 101 Design Graphics I** **1-3-2**
The first of a three course sequence aimed at developing the principles of graphic communication. Technical sketching, industrial print reading and Computer-Aided Drawing (CAD) training are presented concurrently. Topics covered include sketching techniques, lettering, orthographic projection, pictorials, auxiliary views, sectioning, dimensioning, tolerancing, fastening techniques and working drawings.

**MC 102 Design Graphics II** **1-3-2**
A continuation of MC 101 into topics of Computer-Aided Drawing and Design (CADD). The CADD training will include detailing, assembly drawings, Geometric Dimensioning & Tolerancing (GD & T) and 3D solid modeling. (Prerequisite: MC 101)

**MC 103 Design Graphics III** **1-3-2**
This course will provide the student with an in-depth exposure to 3 dimensional CADD (Computer-Aided Drawing and Design) modeling. The topics will emphasize the use of the software in the mechanical design process. Several types of modeling will be covered; wire frame, surface, and solid. Laboratory exercises will focus on creating 3-D model geometry and then extracting 2-D geometry from the 3-D model to create engineering drawings. Prior knowledge of CAD is assumed. (Prerequisite: MC 101)

**MC 150 Statics and Strength of Materials** **3-2-4**
Analysis of external force systems acting upon bodies in equilibrium with subsequent treatment of the stresses and strains induced. Laboratory projects will involve the use of nondestructive and destructive testing equipment to determine the various mechanical properties of materials and their behavior under load. (Prerequisites: MT 133 and PH 133)

**MC 205 Material Science** **3-2-4**
This course studies the structures, properties and behavior of engineering materials as well as how they can be altered through mechanical working and heat treating. Materials considered are ferrous and nonferrous metals and their alloys, plastics and ceramics. Consideration is also given to the selection of these materials to meet manufacturing and design criteria. Laboratory experiments will complement the classroom presentations. (Prerequisites: CH 105; MC 150 strongly recommended)

**MC 228 Introduction to the Thermal Sciences** **4-0-4**
An introduction to the thermal sciences: thermodynamics, fluid mechanics and heat transfer. The fundamentals of equilibrium thermodynamics will be presented. Topics will include thermodynamic properties, processes, process diagrams and cycles. The basic concepts of fluid mechanics as applied to internal and external flows, lift and drag will be discussed. A brief study of heat transfer in its three modes (conduction, convection and radiation) will also be presented. (Prerequisites: MT 205 and PH 133)

**MC 250 Dynamics and Mechanical Design I** **3-2-4**
A study of the effect of forces acting on rigid and deformable bodies subject to static and dynamic loading, and the utilization of this knowledge for the design of mechanical components. Major topics include strength and fatigue, kinematic analysis, power transmission, design methodology, and computer applications. (Prerequisites: EN 125, MC 102, MC 150, MT 134 and IT 102)

**MC 260 Mechanical Design II** **3-2-4**
A continuation of MC 250, treating the topics of rigid and elastic fasteners, shafts and bearings, welds, springs, clutches and brakes. A series of design projects combining several of these elements will be assigned. Computer methods will be employed where appropriate. (Prerequisites: MT 205 and MC 250 )

**MC 280 Fundamentals of Geometric Dimensioning and Tolerancing (GD & T)** **2-0-2**
A study of the technical language used to specify engineering design and drawing requirements with respect to actual "function" and "relationship" of part features. The Geometric Dimensioning and Tolerancing (GD & T) language is based on the US Standard ANSI/ASME Y14.5-1994. Practice in reading and applying the standard will be accomplished with video-taped presentations, discussion periods and workbook practice sessions. (Prerequisite: MC 101or permission of department head of Mechanical Engineering Technology)

**MC 282 Senior Project** **2-2-3**
This course integrates the previous course work and experiences of the students by allowing them to select, define, research, and report on a single, major technical topic of their choice. The formal classroom environment is set aside and the student works under the guidance of a faculty advisor. There are three distinct phases to the course: proposal phase, development phase, and reporting phase. (Prerequisite: EN 101 or permission of department head of Mechanical Engineering Technology)

**MC 290 Hybrid Vehicle Technology** **3-0-3**
A general engineering study of the hybrid vehicle design and its impact on the environment and industry. Engineering principles such as vehicle dynamics, energy conversion, energy storage, lightweight and composite materials, power transmission, basic electronics, and thermal management will be applied to a hybrid vehicle. Topics will include alternate fuels, emissions, power sources, and safety issues. (Prerequisites: MC 101, MT 134, IT 102 and PH 133; or permission of department head of Mechanical Engineering Technology)

## Medical Transcription

**MN 101 Medical Transcription with Lab** **2-2-3**
An introduction to the healthcare record and medical documents. Emphasis is on transcription of basic medical dictation, incorporating English usage and machine transcription skill, medical knowledge, and proofreading and editing skills, and meeting progressively demanding accuracy and productivity standards. (Prerequisites: HS 101 and IT 102 or permission of the instructor; recommended prerequisites: BI 120 and EN 101)

**MN 202 Advanced Medical Transcription** **2-2-3**
A continuation of transcription and interpretation work with various forms of medical and health care documents. Emphasis will be devoted to the accurate interpretation and transcription of advanced medical dictation by physicians and other health care professionals with regard to patient assessment, work-up, clinical course, diagnosis, prognosis, etc. The utilization of correct grammar and spelling, medical knowledge, proofreading and editing skills, referencing, and machine operation will be required to meet increased accuracy and productivity standards. Includes enhancing transcription skills with regard to interpretation of foreign dictations and difficult dictations, and processing work with questionable meanings. Includes introduction to difficult operative and laboratory dictation processing as well as medicolegal implications and responsibilities related to confidentiality and the patient record, ethics, and the level of professionalism to be maintained in the business institution. (Prerequisite: MN 101 or permission of instructor)

## Mental Health

**MH 187 The Helping Relationship: Communication Skills for Today's Professional** **4-0-4**
Knowledge, skills and personal characteristics that are needed in today's professional world of helping careers will be examined. Students will learn the purpose and skill of interpersonal communication techniques through various didactic and experiential methods. Coverage will include documentation and verbal and non-verbal communications, along with

time management, self management and successful work practices. Dynamics of human behavior, culture and specific needs seen in the workplace will be explored.

**MH 193 Mental Health Practicum I*** **2-10-5**
The student will work in an approved clinical setting under the supervision of an approved professional. Periodic conferences between the supervisor and faculty member are planned in order to evaluate the student's progress. At the close of the semester, the student will submit documentation relating theory to practice in the chosen field of experience. *Only for students who matriculated prior to and including January 2004.* (Prerequisites: MH 185, HU 103 and HU 111 with a combined major field GPA of 2.0)

**MH 195 Mental Health Practicum I*** **2-8-4**
The student will work in an approved mental health setting under the supervision of an approved professional. Periodic conferences between the Supervisor and Practicum Coordinator are planned in order to evaluate the student's progress. At the close of the semester, the student will submit documentation of the practicum activities/experience and demonstrate the ability to relate theory to practice in the chosen field of experience. The student will complete a total of 125 hours of field experience. Prerequisites: HU 103, HU 111, HU 221 and MH 187)

**MH 295 Mental Health Practicum II*** **2-10-5**
A continuation of MH 193, Practicum I *Only for students who matriculated prior to and including January 2004.* (Prerequisite: MH 193)

**MH 296 Mental Health Practicum III*** **2-10-5**
A continuation of MH 295, Practicum II. *Only for students who matriculated prior to and including January 2004.* (Prerequisite: MH 295)

**MH 298 Mental Health Practicum II*** **2-8-4**
The student will continue their field experience work in an approved mental health setting under the supervision of an approved professional. Skills, knowledge and personal characteristics are built upon and integrated into the learning and supervision of this course, as well as second year coursework including ethics, individual counseling and conflict resolution. Periodic conferences between the Supervisor and Practicum Coordinator are planned in order to evaluate the student's progress. At the close of the semester, the student will submit documentation of the practicum activities/experience and demonstrate the ability to relate theory to practice in the chosen field of experience. The student will complete a total of 125 hours of field experience. (Prerequisites: HU 103, HU 111, HU 221, HU 242, MH 187 and MH 193)

** The student will also complete an interview with the practicum coordinator the semester prior to the first scheduled practicum. Special requests regarding practicum entrance may be brought to the department head by the student. Review of the requests will be made by the department faculty and special exemptions may be made for entrance into the practicum.*

## Nursing (RN)

*All nursing courses integrate theory and clinical experience. Failure to receive a satisfactory grade in either theory* OR *the clinical experience portion of the course will result in a failing grade. All nursing major field courses must be passed before proceeding to the next level. A grade of "C" or better is required in BI 195, BI 196 and BI 202 to enter or progress in the nursing courses. Students who took BI 101, BI 102 (now BI 195 and BI 196) and/or BI 202* ***at NHTI*** *prior to and including the Spring 2002 semester are exempt from the current "C" or better policy.*

**NU 115 Nursing I** **5-10-8**
Nursing I introduces the student to the role of the associate degree nurse and the basic concepts of nursing practice, including the nursing process, within the Self-Care Framework. The emphasis of the course is on assessment of universal self-care requirements which include air, water, activity and rest, elimination, solitude/social interaction, and food. Maintaining normalcy and avoiding hazards will be addressed within each Universal Self-Care Requirement. The concept of caring and ethical/legal standards of nursing practice are explored. The student, using educative/supportive and partially compensatory nursing systems, cares for clients with reversible deficits. Opportunities for application of knowledge to clinical practice are provided through laboratory experiences and client care assignments in various settings. Evaluation of knowledge occurs throughout the course with interaction between student and faculty to facilitate learning. (Corequisite: BI 195, EN 101, and PY 105)

**NU 116 Nursing IIA** **6-15-11**
The emphasis of Nursing IIA is on the assessment of developmental self-care requirements which maintain conditions that support growth and development over the life cycle. Common health deviations that affect growth and development over the life cycle are presented. The student applies the concept of caring and ethical/legal standards to the care of the client and support persons. The student uses all nursing systems with a focus on the educative/supportive and partially compensatory nursing systems to assist clients and their support persons experiencing various life cycle events. Planned learning experiences provide the student with the opportunity to interrelate social, interpersonal, environmental and technological concepts in the care of clients. Opportunities for application of knowledge to clinical practice are provided through laboratory experiences and client care assignments in various settings. Evaluation of knowledge and clinical practice occurs throughout the course with interaction between the student and faculty to facilitate learning. (Semester 2 Prerequisite: NU 115; a minimum grade of "C" in BI 195; corequisites: BI 196 and PY 220) (Semester 3 Prerequisite: a minimum of grade "C" in BI 195 and BI 196; corequisite: BI 202)

**NU 117 Nursing IIB** **6-15-11**
The emphasis of Nursing IIB is on the care of the client with commonly occurring health deviations related to universal self-care requirements. Focus on caring and ethical/legal standards are continued. Using the nursing process, the student employs all nursing systems within the focus on the educative/supportive and partially compensatory nursing systems within the Self-Care Framework to assist the client within a range of self-care deficits. Learning is planned through concurrent classroom and clinical experiences. Opportunities for application of knowledge to practice are provided through laboratory experiences and client care assignments in various settings. Evaluation of knowledge occurs throughout the course with interaction between the student and faculty. (Semester 2 Prerequisite: NU 115; a minimum grade of "C" in BI 195; corequisites: BI 196, and PY 220) (Semester 3 Prerequisite: a minimum grade of "C" in BI 195 and BI 196; corequisite: BI 202)

**NU 177 Upward Mobility Nursing** **2-0-2**
This course is designed to cover content which assists in the transition for the LPN to the role of the registered nurse. Content includes: Dorethia Orem's self-care theory; role transition; nursing process; teaching and learning process; therapeutic communication; ethical and legal issues in nursing; and a review of fundamental nursing skills. Students are required to have an active LPN license and have met the stated admission requirements. (Prerequisites: Admission to the Upward Mobility Nursing program, including successful completion the NLN Acceleration Challenge Exam I; corequisites: BI 195, EN 101 and PY 105)

**NU 215 Nursing III** **4-15-9**
Nursing III builds on principles and concepts from the discipline of nursing, the biopsychosocial sciences and liberal arts. The emphasis of Nursing III is on the current trends in nursing and on the comprehensive care of the client with health deviations requiring the wholly compensatory nursing system. The student establishes caring relationships and adheres to ethical/legal standards of nursing practice. The student uses the nursing process to design, provide, manage and evaluate care for the client with commonly occurring health deviations. Learning is planned through concurrent classroom and clinical experiences. Opportunities for application of knowledge to practice are provided through laboratory experiences and client care assignments in various settings. Evaluation of knowl-

edge and clinical practice occurs throughout the course with interaction between the student and faculty. (Prerequisites: NU 116 and NU 117; a minimum grade of "C" in BI 195, BI 196 and BI 202; Corequisite: PI 242)

## Paralegal Studies

**** Denotes Certificate Program courses only***

***PL 101 Foundations of Paralegal Studies 1-0-1**
The Foundations of Paralegal Studies course is comprised of two sections, the Introduction to the Legal Profession and a Pre-Employment Seminar. Introduction to the Legal Profession covers in detail the legal systems of the United States, in both the Federal courts and the New Hampshire state courts. Students will also be introduced to the Federal and the New Hampshire constitutions, to the legislative processes and to a "how to" approach to the law. Practical experience in drafting court documents, conducting initial client interviews and investigating cases will be gained. Ethical rules and regulations governing lawyers and paralegals will also be covered. The Pre-Employment Seminar includes writing a resume, drafting a cover letter, refining interview techniques, and conducting an independent job search. In addition, New Hampshire Technical Institute has career and placement counselors available for customized counseling sessions.

***PL 103 Causes of Action in Contract and Tort 1-0-1**
For the purpose of this course, a "cause of action" is defined as a right the law gives and will enforce for one to recover something from another. It is the legal foundation from which the plaintiff derives the right of action against a defendant. The course is limited to the elements and defenses of various causes of action in contract and tort; it does not address remedies. (Prerequisites: PL 101 or permission of department head of Paralegal Studies)

***PL 104 Legal Research 4-0-4**
The paralegal will be able to assist in most aspects of legal research in support of the drafting of clear and concise legal writings. Functional skills acquired in this course include a working knowledge of federal and state statutory research including legislative history; federal and state case law reporter systems; the hierarchy of the federal and state court systems; legal form books; law digests; case and statutory citators; legal treaties; legal periodicals; legal encyclopedia; and, both local and national standards of citation used in legal writing. An introduction to the use of LEXIS will also be included. (Prerequisites: PL 101 or permission of department head of Paralegal Studies)

**PL 106 Introduction to Legal Studies 3-0-3**
Introduction to Legal Studies covers in detail the legal systems of the United States, in both the Federal courts and the New Hampshire state courts. Students will be introduced to an overview of substantive and procedural law, legal research, interviewing and investigative skills. Ethical rules and regulations governing lawyers and paralegals will also be covered.

**PL 107 Contracts and Torts 3-0-3**
The contract portion of the class will cover Contract law from formation, defenses and remedies for breach. Likewise, various civil wrongs in which the victim is entitled to a remedy in the form of damages, including negligence, product liability, trespass and defamation, are addressed in the Torts section of the course. (Prerequisites: PL 106 or permission of department head of Paralegal Studies)

**PL 110 Litigation and Trial Preparation 3-0-3**
The student will be able to assist in virtually all phases of litigation. Functional skills acquired include preparing and maintaining the file; gathering information through client interviews; drafting pleadings; organizing and indexing documents; tracing evidence; examining public records; and preparing briefs and memoranda. (Prerequisite: PL 106 and PL 107 or permission of department head of Paralegal Studies)

**PL 221 Real Estate 3-0-3**
The student will be able to assist in virtually all phases of transactions in real property. Functional skills acquired include: conducting title searches; assisting in preparation and drafting of deeds, contracts of sale, leases and abstracts of title; gathering and reviewing documentation necessary in mortgage transactions; recording deeds and mortgages; and organizing and witnessing documents at the closing. (Prerequisites: PL 106, PL 107 or permission of department head of Paralegal Studies)

**PL 225 Legal Research and Writing 3-2-4**
The paralegal will be able to assist in most aspects of legal research in support of the drafting of clear and concise legal writings. Functional skills acquired in this course will include a working knowledge of federal and state statutory research including legislative history, federal and state case law reporter systems, the court systems, legal form books, law digest, case and statutory citators, legal treaties and legal periodicals. In addition, an introduction to the use of LEXIS will be included. Furthermore, the student will develop the specific writing skills necessary for the paralegal. Preparation of trial memorandum and appellate court briefs will also be covered. Emphasis will be on brevity, clarity, and precision of expression together with the refinement of editing skills. (Prerequisites: PL 106, PL 107 and PL 110 or permission of department head of Paralegal Studies)

**PL 231 Business Organizations and Bankruptcy 3-0-3**
The student will be able to assist in the formation, daily administration, reorganization and dissolution of a corporate entity. Functional skills acquired include: preparing articles of incorporation; satisfying state filing requirements; taking minutes at meetings of board of directors; preparing registration materials for regulatory agencies; and preparing bankruptcy petitions, claims and other documents. (Prerequisites: PL 106, PL 107 or permission of department head of Paralegal Studies)

*** PL 241 Family Law 1-0-1**
The student will examine the substantive and procedural law and the legal ethics relating to marriage, divorce, support and custody issues, and will be prepared to assist the attorney in drafting pleadings and completing preliminary research relative to these aspects of family law. (Prerequisites: All PL courses at 100 level or permission of department head of Paralegal Studies)

**PL 242 Domestic Relations Law 3-0-3**
The student will examine the substantive and procedural law and the legal ethics relating to marriage, divorce, and custody issues, and will be prepared to assist the attorney in drafting pleadings and completing preliminary research relative to these aspects of Domestic Relations Law. (Prerequisites: PL 106 and PL 107 or permission of department head of Paralegal Studies)

**PL 251 Probate Estates and Trusts 3-0-3**
The student will be able to assist in the planning and administration of the decedent's estate. Functional skills acquired include: assisting with estate planning; collecting assets; notifying beneficiaries; assisting in preparation of Federal and State Estate Tax Returns; submitting documentation to the Probate Court; transferring securities; drawing checks for the Executor's signature; and maintaining account records. (Prerequisites: PL 106 and PL 107 or permission of department head of Paralegal Studies)

*** PL 261 Criminal Process 1-0-1**
The student will examine the various elements of New Hampshire criminal practice and procedure and will trace the steps by which the process is completed, from the initial interview through the post-trial procedure. (Prerequisites: All PL courses at 100 level or permission of department head of Paralegal Studies)

**PL 262 Criminal Law and Procedures for the Paralegal 3-0-3**
The student will examine the various elements of New Hampshire criminal practice and procedure and will trace the steps by which the process is completed, from the initial interview through the post-trial procedure.

(Prerequisites: PL 106, PL 107, and PL 110 or permission of department head of Paralegal Studies)

**PL 270 Internship** **0-9-3**
The internship offers the opportunity to combine the theoretical and practical issues of the classroom in the workplace setting. Students are required to complete a specified number of hours in a law office or law-related environment. Weekly meetings will be held with the internship coordinator to discuss the ongoing experience. (Prerequisite: All 100 level PL courses or permission of department head of Paralegal Studies)

*** PL 271 Legal Writing** **1-0-1**
This course focuses on the specific writing skills necessary for the paralegal. The assignments involve practical examples of paralegals' work products, as demonstrated in the areas covered in the Certificate curriculum. Preparation of a trial court memorandum and an appellate court brief will also be covered. Emphasis will be put on brevity, clarity, and precision of expression together with a refinement of editing skills. (Prerequisites: All other 100 level PL courses or permission of department head of Paralegal Studies; corequisite: PL 110)

## Paramedic Emergency Medicine

**PM 111 Paramedic Procedures** **1-3-2**
This performance based course focuses on the broad spectrum of paramedic procedures. Students will perform the technical skills drawn from Advanced Trauma, Advanced Cardiology, Medical Emergencies, Special Populations, and Pharmacology courses. An emphasis will be placed on the skills competencies making students eligible for advanced hospital and field clinic rotations. (Prerequisites: all fall PM courses; corequisites: PM 125, PM 135 and PM 244)

**PM 117 Physical Assessment** **2-0-2**
A comprehensive course that provides integration of knowledge and terminology utilized for physical assessment. Included are life span differences and assessment of acute and chronic patients who present with medical problems. (Corequisites: PM 142, PM 150 and PM 161)

**PM 125 Pharmacology** **3-0-3**
An advanced course covering Pharmacology related to paramedic practice. Includes cardiovascular, respiratory, analgesic, G.I., antibiotic and CNS medications. (Prerequisites: all fall PM courses; corequisites: PM 111, PM 135 PM 162, and PM 244)

**PM 135 Medical Emergencies** **3-0-3**
A comprehensive course that includes the pathophysiology and management of selected medical emergencies. Critical thinking and problem solving will be emphasized using a scenario-based approach. (Prerequisites: all fall PM courses; corequisites: PM 111, PM 125, PM 162 and PM 244)

**PM 142 Cardiology I** **2-0-2**
This course focuses on the conduction system of the heart, electrocardiography, as well as interpretation and the treatment of cardiac arrhythmias. (Corequisites: PM 117, PM 150 and PM 161)

**PM 150 Advanced Trauma** **3-0-3**
A comprehensive course that covers the assessment, pathophysiology and management of trauma including: head, spinal, chest, abdominal, soft tissue, and musculoskeletal trauma. MCI, environmental emergencies, and HAZMAT are also covered. (Corequisites: PM 117, PM 142 and PM 161)

**PM 161 Integration Lab I** **0-3-1**
This scenario-driven course is designed to develop team leadership skills and clinical decision-making. A great emphasis will be placed on paramedic assessment skills, treatment aims and outcomes. Students will draw from the knowledge and interventions learned in Cardiology, Trauma, and Physical Assessment. (Corequisites: PM 117, PM 142 and PM 150)

**PM 162 Integration Lab II** **0-3-1**
This scenario-driven course is designed to develop team leadership skills and clinical decision-making. A great emphasis will be placed on paramedic assessment, diagnostic skills, treatment aims and outcomes. Students will draw from the knowledge and interventions learned in Advanced Cardiology, Medical Emergencies, and Pharmacology courses. (Prerequisites: all fall PM courses; corequisites: PM 125, PM 135, PM 150 and PM 244)

**PM 163 Integration Lab III** **0-2-1**
This scenario-driven course is designed to develop team leadership skills and clinical decision-making. A great emphasis will be placed on paramedic assessment, diagnostic skills, treatment aims and outcomes. Students will draw from the knowledge and interventions learned in Special Populations. (Prerequisites: all first year PM courses; corequisite: PM 201)

**PM 164 Integration Lab IV** **0-2-1**
This scenario-driven course is designed to develop team leadership skills and clinical decision-making. A great emphasis will be placed on paramedic assessment, diagnostic skills, treatment aims and outcomes. Students will draw from knowledge and interventions learned in Field Operations and Advanced Paramedic Practice. (Corequisites: PM 210 and PM 278)

**PM 190 Introduction to the Clinical Environment** **1-0-1**
A course designed to set students up for success within a variety of clinical systems. An emphasis will be placed on mandatory inservice training topics such as universal precautions, body mechanics, fire procedures, incident prevention and other clinical protocols and procedures. Interpersonal and communication skills will be an integral part of the course and students will gain an understanding of clinical documentation systems. (Prerequisites: all first year PM courses; corequisite: PM 194)

**PM 194 Hospital Clinical** **0-18-5**
A comprehensive hospital experience that focuses on theory, assessment skills, invasive skills, and affective behaviors expected of a paramedic. A total of 224 hospital hours. (Prerequisites: all first year PM courses; corequisite: PM 190)

**PM 200 Introduction to the Field Experience** **1-0-1**
This field orientated primer will enhance student's preparation and provide orientation for field clinical. (Corequisite: PM 296)

**PM 201 Special Populations** **3-0-3**
This advanced level course includes assessment, paramedic diagnosis and treatment for all special populations including (OB, Pedi, Geriatrics, Psych, Chronic Disease and patients with special needs). (Prerequisites: all first year PM courses; corequisite: PM 163)

**PM 210 Field Operations** **2-0-2**
An overview course covering all aspects of field practice including roles and responsibilities, medical control, written / oral communications, occupational stress, safety and legal considerations. Protocol interpretation and introduction to research design are covered. (Corequisites: PM 164 and PM 278)

**PM 244 Advanced Cardiology** **2-0-2**
This comprehensive course includes the pathophysiology, clinical manifestations, and treatment of cardiovascular emergencies. Advanced Cardiac Life Support certification (ACLS) is an integral part of the course. (Prerequisites: all fall PM courses; corequisites: PM 125 and PM 135)

**PM 278 Advanced Paramedic Practice** **2-0-2**
The course is designed to integrate paramedic knowledge, skills and behaviors through practice and lecture. An emphasis is placed on detailed paramedic assessment, diagnosis and priorities in treatment. Students

will develop leadership skills in the management of medical, traumatic, and psychological problems. This course will also lead to National Registry written exam preparation. Career opportunities, affective behaviors and preparation for entry into the EMS job market will also be discussed. (Corequisites: PM 210 and PM 164)

**PM 296 Field Clinical I** **0-9-3**
A comprehensive field experience where a student will ride 160 hours with an Advanced Life Support (ALS) service. In addition, a student is required to serve as a team leader on a minimum of 20 calls. (Prerequisite: PM 194; corequisite: PM 200)

**PM 297 Field Clinical II** **0-9-3**
A comprehensive field experience where students ride a total of 160 hours with an Advanced Life Support (ALS) service. In addition, a student is required to serve as a team leader on a minimum of 30 calls. (Prerequisite: PM 296)

## Paramedic Emergency Medicine *Preparation Track*

**EMT 101 Basic Life Support Field Clinic** **0-6-2**
This clinical course will allow the EMT Basic to gain field experience and practice under the direction of an experienced preceptor. 100 hours and 50 calls must be completed by the end of the clinical experience. *Two institutional credits awarded for this course do not count toward graduation courses but are calculated into GPA.* (Corequisite: EMT 104)

**EMT 102 Basic Life Support Field Clinic** **0-9-3**
This clinical course will allow the EMT Basic to gain field experience and practice under the direction of an experienced preceptor. 160 hours and 50 calls must be completed by the end of the clinical experience. *Three institutional credits awarded for this course do not count toward graduation courses but are calculated into GPA.* (Corequisite: EMT 105)

**EMT 103 Basic Life Support Field Clinic** **0-9-3**
This optional clinical course will allow the EMT Basic to gain additional field experience and practice under the direction of an experienced preceptor. 160 hours of additional experience and the balance of 100 calls will be completed. *Three institutional credits awarded for this course do not count toward graduation courses but are calculated into GPA.*

**EMT 104 Topics in EMT Basic Practice** **2-0-2**
This integrative course will include exploration of topics related to EMT Basic practice. The course will enhance knowledge, skills and professional behaviors expected of the EMT Basic. *Two institutional credits awarded for this course do not count toward graduation courses but are calculated into GPA.*

**EMT 105 Advanced EMT Basic Practice** **2-0-2**
This integrative course will include exploration and refinement of EMT Basic knowledge, skills and behaviors. The course will include in-depth coverage of EMT Basic clinical roles. *Two institutional credits awarded for this course do not count toward graduation courses but are calculated into GPA.*

## Peer Mentoring

**PRMT 101 Peer Mentoring Seminar** **2-0-2**
A seminar for peer mentors working the NHTI departments and programs. This seminar includes readings, presentations, activities, and projects which help students develop as peer mentors. Students are expected to participated in reflection on and planning of their peer mentoring work. (Prerequisite: Faculty recommendation) *Two institutional credits awarded for this course do not count toward graduation but are calculated into GPA.*

## Philosophy

**PI 110 Introduction to Philosophy** **3-0-3**
This course is an introduction to the methods, problems, and theories of the main branches of philosophy and the indestructible questions raised in regard to reality, truth, morality, power, meaning, purpose, and valid reasoning. Topics to be considered include the basis for beliefs concerning the nature and existence of God, experience and reason in the development of knowledge, the mind and its place in nature, freedom and determinism, and the basis and nature of morality.

**PI 242 Contemporary Ethical Issues** **3-0-3**
A philosophical examination of major contemporary ethical issues. Topics may include bioethics, business ethics, environmental ethics, human sexuality, abortion, mercy killing and cheating. The emphasis is on acquiring the philosophical skills necessary to guide self and others in the process of ethical decision making. Cases are used for study and discussion.

## Physics

**PH 100 Pre-Engineering Technology Physics** **4-2-5**
This course covers the fundamentals of mechanics. Topics included: velocity; acceleration; Newton's Laws; motion in two dimensions, momentum, work, vectors, simple machines, energy, conservation of momentum and energy. A graphing calculator* will be required. *The five institutional credits awarded for this course do not count toward graduation requirements but are calculated into GPA.* (Prerequisite or corequisite: MT 109)

**PH 133 Physics I: Mechanics, Heat** **3-2-4**
A study of elementary classical physics with emphasis on the application of physical principles to problem solving. Topics include: linear and projectile motion, Newton's laws, translational and rotational equilibrium, work and energy, momentum, circular and rotational motion, thermal properties of matter, heat transfer. A graphing calculator* will be required. (Prerequisite or Corequisite: MT 133)

**PH 135 Physics II: Light, Sound, Electricity** **2-2-3**
Topics include: wave motion, mechanical waves, sound, light, electrostatics, Ohm's law, D.C. circuits, Kirchoff's laws. A graphing calculator* will be required. (Prerequisite: PH 133)

**PH 202 Physics IIa: Wave Motion and Oscillations (7.5 weeks)** **3-2-2**
Topics include: mechanical wave concepts, sound, light, harmonic motion, interference effects, resonance, Doppler effect, geometrical optics of mirrors and lenses, physical optics. A graphing calculator* will be required. (Prerequisite: PH 133)

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** A Texas Instruments model TI-83+ is required for PH 100,* PH 133, PH 135 and PH 202.

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## Political Science

**PS 105 State and Local Government** **3-0-3**
A survey of state and local government concentrating on their origins and development in the United States. The course includes the forms of government; executive, legislative and judicial organization and procedures; distribution of power between the levels of government; and the problems of metropolitan government.

**PS 120 American Federal Government** **3-0-3**
An introduction to the basic structures of the United States national government and the political processes involved. Topics include the federal Constitution; federal-state relations; the relationship among the Executive, the Congress, and the Judiciary; the election process; and the activities of interest groups.

**PS 220 Public Administration** **3-0-3**
This course discusses the growth of the public sector and the methods by which this sector can be managed. Topics include public management techniques, effective decision-making, civil service, budgeting, public organizations, and the politics of public sector administration.

**PS 231 American Government** **3-0-3**
This course is an introduction to the basic structures of the political process in the United States. It combines attention to political activity at both the national (Federal) and the State and local levels. The topics covered include analyses of the Federal and States' Constitutions, the American political economy, State/Federal relationships, inter-branch matters between the Executive, Legislature and Judiciary branches, the elective process, activities of the public and interest groups, and the governments' handling of the public purse.

## Practical Nursing (PN)

*All practical nursing courses integrate theory and clinical experience. Failure to receive a satisfactory grade in either theory OR the clinical experience portion of the course will result in a failing grade. All practical nursing major field courses must be passed before proceeding to the next level. Those students electing to take the BI 195, BI 196, BI 202 sequence instead of BI 107 must earn "Cs" or better in those courses to enter or progress in the nursing courses.*

**PN 101 Practical Nursing I** **4-12-8**
This course provides the student with knowledge of fundamental concepts in communication and helping processes to be utilized within the role of the LPN. Major concepts will be Orem's self-care theory, the wellness-illness continuum and health care delivery. Students will be introduced to basic nursing interventions and concepts of nutrition, ethical/legal issues of nursing, and mental health. Simulated clinical laboratory and clinical experiences will provide opportunities for mastering basic skills. (Corequisites: BI 107, EN 101 and PY 105) (BI 107 is spread over two semesters: 5 credits will be earned at the end of the second part of the course pending successful completion of both parts of the course) *Students who are taking the BI 195, BI 196, BI 202 sequence instead of BI 107 must complete BI 195 by the end of PN 101. A minimum grade of "C" must be earned in BI 195 to progress to PN 102.*

**PN 102 Practical Nursing II** **3-15-8**
This course describes nursing care that promotes wellness in clients throughout the lifespan. The nurse, within the LPN role, provides this care utilizing the nursing process. Building on Orem's universal self-care requirements learned in Practical Nursing I, the student will be introduced to developmental self-care requirements from conception to old age. Content will include: women and child health, health deviations, and alterations in immune and hematology function. The concepts of pharmacology, nutrition, ethical/legal issues, and mental health will be integrated throughout the course. Learning opportunities will be provided in a variety of clinical settings to facilitate integration and application of theoretical knowledge. (Prerequisites: PN 101; satisfactory progress in BI 107; corequisites: BI 107, PY 220) *Students who are taking the BI 195, BI 196, BI 202 sequence instead of BI 107 must complete BI 102 by the end of PN 102. A minimum grade of "C" must be earned in BI 102 to progress to PN 103.*

**PN 103 Practical Nursing III** **4-15-9**
This course describes nursing care for clients who have self-care deficits associated with well defined health deviations. The LPN, applying ethical and legal standards, provides this care via the nursing process. Content includes alterations in respiratory, cardiovascular, endocrine, mobility, elimination, neurosensory and gastrointestinal function. The concepts of pharmacology, nutrition, ethical/legal issues, and mental health will be integrated throughout the course. Additional topics will include: scope of practice, licensure, and management skills. Learning opportunities will be provided in a variety of clinical settings to facilitate integration and application of theoretical knowledge. (Prerequisites: PN 101 and PN 102; minimum of "C" or better in BI 107; corequisite: MT 129) *Students who are taking the BI 195, BI 196, BI 202 sequence instead of BI 107 must complete BI 202 by the end of PN 103. In addition, students must earn a minimum grade of "C" in BI 202 in order to graduate.*

## Project Lead The Way®

*Project Lead The Way® is an initiative which allows high school students to explore careers in engineering and engineering technology by completing a sequence of courses as part of their high school curriculum. Students who have completed any of the courses listed below may be eligible to apply some of these credits to meet requirements in NHTI's Mechanical Engineering Technology and Manufacturing Engineering Technology programs. Students should consult with the Department Head of Mechanical/Manufacturing Technology to see if credits may be applicable.*

**PLTW 101 Introduction to Engineering Design** **4-0-4**
Students are introduced to the fundamentals of engineering design and drafting through AutoCAD Inventor, a 3-D solid modeling software package. Topics include problem-solving techniques, documentation, working drawings, prototyping, and manufacturing considerations. *Assuming successful completion, this course may be used to meet the requirement for MC 102 in the Mechanical and Manufacturing Engineering Technology programs.*

**PLTW 102 Digital Electronics** **4-0-4**
The concepts of digital electronics are presented using theory, simulation software, and breadboarding. Topics include basic electricity, Boolean algebra, gate arrays, and digital-to-analog/analog-to-digital applications. *Assuming successful completion, this course may be used to meet the requirement for the EL 115 Digital Fundamentals course in the Broadband Networking and Communications Technology program as well as Electronic and Computer Engineering Technology programs.*

**PLTW 103 Principles of Engineering** **4-0-4**
A survey of engineering concepts and careers. Topics include ethics, communication, physical principles, and measurement. A portion of the course is taught with programmable mechanical breadboarding hardware, allowing construction of operable electromechanical systems.

**PLTW 104 Computer Integrated Manufacturing** **4-0-4**
An overview of modern manufacturing is presented, from concept to product. Students use a variety of software packages to design, model, and produce parts with computer-controlled tools.

## Psychology

**PY 105 Introduction to Psychology** **3-0-3**
An introductory college course in psychology which focuses on the fundamental facts and principles of psychology within the broader context of contemporary personal and social concerns. Topics may include the historical development of the discipline, scientific methodology, human development, motivational theory, consciousness, sensation and perception, learning, thinking, memory, emotions, biological basis of behavior, personality theory, psychopathology, sexuality, and measurements and statistics. *Available in Honors format.*

**PY 205 Crisis Intervention** **3-0-3**
This course focuses on the emotional aspects of individuals involved in a crisis situation. Coverage is given to the theory and management of specific situations such as stress, death and dying, drug abuse, suicide, sexual assault, disasters and violence. Consideration is also given to the functions and legalities of the mental health system. (Prerequisite: PY 105)

**PY 209 Educational Psychology** **3-0-3**
Psychological principles are applied to the educational environment. Theories of learning, memory, cognition, and behavior management are used to help the student find an optimal instructional approach. While this course is a distribution *requirement* for the Associate in Science in Education program it may also be applied to a concentration of courses in Psychology or Social Sciences. (Prerequisite: PY 105)

**PY 210 Abnormal Psychology** **3-0-3**
This course is designed to provide an overview of pathological behaviors currently classified in the *Diagnostic and Statistical Manual of Mental Disorders,* 5th Edition. Research and issues relating to the nomenclature, incidence, etiology, and treatment of the disorders will be covered. Case studies will be used to explore the physiological, behavioral, social, and cognitive variables that contribute to each condition. (Prerequisite: PY 105)

**PY 220 Human Growth and Development: The Life Span** **3-0-3**
A study of the psychological implications of the growth and development of the human person with a special emphasis on the physical, cognitive, social, emotional and ethical dimension in infancy, childhood, adolescence, and adulthood. *Available in Honors format.* (Prerequisite: PY 105)

**PY 280 Individual Counseling: Theory and Practice** **3-0-3**
Discussion of the most widely used theories of counseling offering students the opportunity to integrate the theories within their own value systems. Counseling practice will consist of peer counseling process, audio and video recording critiques, and role-playing in a seminar setting. (Prerequisites: MH 185 and PY 105)

**PY 283 Group Counseling** **3-0-3**
A study of therapeutic intervention as carried out in and through a group. The course design includes academic discussion of group processes and participation in a concomitant laboratory experience. (Prerequisites: MH 185 and PY 105)

## Radiation Therapy

**RTH 101 Introduction to Radiation Therapy** **3-0-3**
Content is designed to provide the student with an overview of the foundations in radiation therapy and the practitioner's role in the health care delivery system. Principles, practices and policies of the educational program, health care organizations, principles of radiation and health safety and professional responsibilities, as well as ethics, law and medical terminology of the radiation therapist will be discussed and examined.

**RTH 110 Principles and Practice of Radiation Therapy I** **3-2-4**
Content is designed to provide an overview of cancer and the specialty of radiation therapy. The medical, biological and pathological aspects as well as the physical and technical aspects will be discussed. The roles and responsibilities of the radiation therapist, the treatment prescription, the documentation of treatment parameters and delivery will also be discussed.

**RTH 115 Patient Care** **1-0-1**
Content is designed to provide the student with foundation concepts and competencies in assessment and evaluation of the patient for service delivery. Psychological and physical needs and factors affecting treatment outcome will be presented and examined. Routine and emergency care procedures will be presented.

**RTH 150 Medical Imaging and Processing** **2-0-2**
Content is designed to establish a knowledge base in factors that govern and influence the production and recording of radiographic images for patient simulation, treatment planning and treatment verification in radiation oncology. Radiation oncology imaging equipment and related devices will be emphasized. Content will also include quality management programs and continuing quality improvements in radiation oncology. (Prerequisites: RTH 110 and XR 180)

**RTH 190 Clinical Practice I** **0-16-3**
Content is designed to provide sequential development, application, analysis, integration, synthesis and evaluation of concepts and theories in radiation therapy. Through structured sequential assignments in clinical facilities, concepts of team practice, patient-centered clinical practice and professional development will be discussed, examined and evaluated. (Prerequisites: RTH 101 and RTH 110)

**RTH 195 Clinical Practice II** **0-16-3**
A continuation of Clinical Procedures I designed to provide sequential development, application, analysis, integration, synthesis and evaluation of concepts and theories in radiation therapy. Through structured sequential assignments in clinical facilities, concepts of team practice, patient-centered clinical practice and professional development will be discussed, examined and evaluated. (Prerequisite: RTH 190)

**RTH 200 Radiation Protection and Biology** **3-0-3**
Content is designed to present basic principles of radiation protection and safety for the radiation therapist. Radiation health and safety requirements of federal and state regulatory agencies, accreditation agencies and health care organizations are incorporated. Specific responsibilities of the radiation therapist are discussed, examined, performed and evaluated. Content also includes basic concepts and principles of radiation biology. The interactions of radiation with cells, tissues and the body as a whole, and resultant biophysical events, will be presented. Discussion of the theories and principles of tolerance dose, time dose relationships, fractionation schemes and the relationship to the clinical practice of radiation therapy will be discussed, examined and evaluated. (Prerequisites: RTH 101, XR 180 and RTH 150)

**RTH 205 Treatment Planning** **3-0-3**
Content is designed to establish factors that influence and govern clinical planning of patient treatment. Encompassed are isodose descriptions, patient contouring, radiobiologic considerations, dosimetric calculations, compensation and clinical application of treatment beams. Optimal treatment planning is emphasized along with particle beams. Sterotactic and emerging technologies are presented. (Prerequisites: RTH 101 and RTH 110)

**RTH 210 Principles and Practice of Radiation Therapy II** **3-2-4**
Content is designed to examine and evaluate the management of neoplastic disease using knowledge in arts and sciences, while promoting critical thinking and the basis of ethical clinical decision making. The epidemiology, etiology, detection, diagnosis, patient condition, treatment and prognosis of neoplastic disease will be presented, discussed and evaluated in relationship to histology, anatomical site and patterns of spread. The radiation therapist's responsibility in the management of neoplastic disease will be examined and linked to the skills required to analyze complex issues and make informed decisions while appreciating the character of the profession. (Prerequisites: RTH 101 and RTH 110; corequisite: RTH 205)

**RTH 215 Sectional Anatomy and Pathology** **3-0-3**
Content is designed to study normal sectional anatomy via diagrams and radiologic images. The pathology content is broken into two parts: general pathology and neoplasia. General pathology introduces basic disease concepts, theories of disease causation and system-by-system pathophysiologic disorders most frequently encountered in clinical practice. Neoplasia provides an in-depth study of new and abnormal development of cells. The processes involved in the development and classification of both benign and malignant tumors and site-specific information on malignant tumors is presented. (Prerequisites: BI 195 and BI 196)

**RTH 220 Radiation Therapy Physics** **3-0-3**
Content is designed to review and expand concepts and theories in the radiation physics course. Detailed analysis of the structure of matter, properties of radiation, nuclear transformations, x-ray production and interactions of ionizing radiation are emphasized. Also presented are treatment units used in external radiation therapy, measurement and quality of ionizing radiation produced, absorbed dose measurement, dose distribution and scatter analysis. (Prerequisites: XR 180 and RTH 150; corequisite: RTH 200)

**RTH 280 Registry Review** **1-0-1**
This course is designed to prepare the radiation therapy student to take the national certification examination through the American Registry of Radiologic Technologists (ARRT). Various topics will be addressed each week with a practice registry exam given to complete the program. (Prerequisites: RTH 220 and RTH 210)

**RTH 290 Clinical Practice III** **0-24-4**
A continuation of Clinical Procedures I and II, and the beginning clinical assignment for Radiation Therapy Certificate students, content is designed to provide sequential development, application, analysis, integration, synthesis and evaluation of concepts and theories in radiation therapy. Through structured sequential assignments in clinical facilities, concepts of team practice, patient-centered clinical practice and professional development will be discussed, examined and evaluated. (Prerequisites: RTH 190 and RTH 195; or admission to the Radiation Therapy Certificate program)

**RTH 293 Clinical Practice IV** **0-24-4**
The fourth clinical course continues to build on the sequential development, application, analysis, integration, synthesis and evaluation of concepts and theories in radiation therapy. Through structured sequential assignments in clinical facilities, concepts of team practice, patient-centered clinical practice and professional development will be discussed, examined and evaluated. (Prerequisite: RTH 290)

**RTH 295 Clinical Practice V** **0-32-6**
The fifth clinical course continues to build on the sequential development, application, analysis, integration, synthesis and evaluation of concepts and theories in radiation therapy. Through structured sequential assignments in clinical facilities, concepts of team practice, patient-centered clinical practice and professional development will be discussed, examined and evaluated. (Prerequisite: RTH 293)

**RTH 296 Clinical Practice VI** **0-32-6**
The final clinical course is designed to perfect the content of the previous didactic and clinical courses. The content is designed to provide sequential development, application, analysis, integration, synthesis and evaluation of concepts and theories in radiation therapy. Through structured sequential assignments in clinical facilities, concepts of team practice, patient-centered clinical practice and professional development will be discussed, examined and evaluated. (Prerequisite: RTH 295)

## Radiologic Technology

**XR 103 Radiographic Positioning I** **1-2-2**
This course introduces the student to the principles of radiography, radiographic terminology and radiation protection. This course covers the anatomy and radiographic positioning of the thoracic and abdominal viscera.

**XR 109 Clinical Seminar** **1-0-1**
The clinical seminar course is a series of continuous focused lectures pertinent to each academic/clinical semester. Radiologic science, patient care, film critiques, and advanced imaging methods will be presented and discussed.

**XR 116 Image Production and Evaluation I** **2-2-3**
A discussion of the principles leading to the production of the manifest image. Intensifying screens, radiographic film and processing, factors affecting radiographic quality, grids and accessories will be covered.

**XR 123 Radiation Protection** **3-0-3**
Topics covered in this course include: radiation quantities and units; permissible dosages; shielding methods and devices; interaction of radiation with the body tissues; biological effects and methods of monitoring. Other topics include an overview of cell biology, radiation energy transfer determinants, molecular effects of irradiation, cell radiosensitivity and organic damage from ionizing radiation. (Prerequisites: XR 101, XR 116 and XR 220)

**XR 151 Radiologic Nursing Procedures** **2-0-2**
Discussion of the proper handling of sick, injured and infectious patients along with the proper care and use of medical equipment and supplies. Medical ethics and the medicolegal aspects of radiologic technology will be discussed.

**XR 159 Radiographic Positioning II and Clinical Procedures I** **3-18-7**
Routine radiographic positioning of the osseous system. To be included are medical terminology, topographical anatomy and special considerations for pediatric patients. The clinical experience is an extension of the classroom where the student will develop the theory into practical skills through instruction, application, critique and evaluation on common procedures. Students will participate in a one- hour weekly clinical seminar. (Prerequisite: XR 116 and XR 151)

**XR 164 Radiographic Positioning III and Clinical Procedures II** **3-18-7**
Routine and radiographic positioning of the biliary, gastrointestinal and urinary tracts, the reproductive and central nervous systems and skull, as well as examinations of the salivary glands, soft-tissue and joint structures. Imaging of the breast will be discussed. Also included are medical terminology, topographical anatomy and special considerations for pediatric patients. Clinical experience is continued in this course. Students will participate in a one-hour weekly clinical seminar. (Prerequisite: XR 159)

**XR 165 Radiographic Clinical Procedures III** **0-24-4**
A continuation of the clinical component of XR 164. Students will complete their first clinical assignment and build on the procedures taught in XR 161 and XR 164. An approximate total of 264 clinical hours are required. Students will participate in a one-hour weekly clinical seminar. (Prerequisites: XR 159 and XR 164)

**XR 180 Radiographic Equipment Operation and Maintenance** **3-0-3**
A basic review of algebra and the physical principles of matter, leading to tube production of electricity with its ramifications pertinent to the field of radiologic technology. Basic radiation producing circuitry is discussed including closed circuit television and videotaped recording. The course will also include an overview of radiation therapy, nuclear medicine and ultrasonography. (Prerequisites: XR 116 and XR 220)

**XR 201 Pathology for Radiologic Technologists** **3-0-3**
This course introduces the student to the subject of human disease processes. A wide variety of conditions are reviewed. Some topics covered include types of fractures, the malignant disease process, cardiovascular disease, the effect of viruses and bacteria on people and the inflammatory process. (Prerequisites: XR 159, XR 164, and XR 165)

**XR 203 Advanced Radiographic Procedures** **3-0-3**
This course presents positioning considerations for special studies to include arthrography, myelography, venography, hysterosalpingography, sialography, orthoroentgenography, trauma radiography, mobile radiography and pediatric radiography. It also provides a brief introduction to the equipment and procedures of the specialty modalities of Radiology including tomography, CT scanning, mammography, MRI, bone densitometry, ultrasound, radiation therapy, angiography and interventional procedures. In addition, this course introduces the student to cross sectional anatomy of the head/neck, thorax, abdomen/pelvis, vertebral column and extremities. (Prerequisites: XR 103, XR 159 and XR 164)

**XR 220 Image Production and Evaluation II** **2-2-3**
Topics covered in this class include automatic exposure control, technique charts, tube rating charts, tomography, stereoradiography and computerized radiography. Principles of quality assurance and quality control and equipment will also be covered. (Prerequisite: XR 116)

**XR 294 Radiographic Clinical Procedures IV** **0-24-4**
A continuation of XR 165. Some students will be required to rotate through a second clinical affiliate for the purpose of learning specialized procedures as part of this course. An approximate total of 360 hours is required. Students will participate in a one-hour weekly clinical seminar. (Prerequisite: XR 159, XR 164 and XR 165)

**XR 295 Radiographic Clinical Procedures V** **0-32-6**
A continuation of the clinical practices of the program. Students will spend four days a week in the clinical site. This internship will allow students to refine their skills in preparation for the workplace. Once a month, students will attend a registry review session on campus to prepare for the national certification exam given by the American Registry of Radiologic Technologists (ARRT). (Prerequisite: XR 294)

## Real Estate

**RE 101 Fundamentals of Real Estate** **3-0-3**
Fundamentals course in real estate in preparation for the licensing exam. The course meets the statutory requirements of the New Hampshire Real Estate Commission for salesperson examinations. Topics discussed include: listing, NH rules and regulations, types of interest in real estate, real estate taxes, liens, financing, appraising, closing statements, etc.

**RE 102 Real Estate Marketing and Advertising** **3-0-3**
The student will gain a thorough understanding of the tools and strategies utilized in the marketing and advertising of real estate with focus on: market research and analysis, communications, advertising, and the selling process. (Prerequisite: RE 101 or permission of department head of Business Administration)

**RE 162 Real Estate Computer Applications** **2-2-3**
This course will prepare the student to utilize the Granite State Information Network in the listing and marketing of property. Other computer applications in the management of a real estate brokerage will be studied. (Prerequisite: IT 102)

**RE 201 Real Estate Internship I** **1-10-4**
The student will work in a real estate brokerage as a licensed assistant under the supervision of an approved real estate professional. Periodic conferences between the supervisor and the program coordinator are planned in order to evaluate the student's progress. At the close of the semester, the student will submit documentation relating theory to practice in the chosen experience. (Prerequisite: RE 101 including passage of the NH Real Estate Salespersons' Licensing Examination.)

**RE 220 Real Estate Finance** **3-0-3**
This course will develop an understanding of the nature and cycle of real estate finance. Topics include: money and the monetary system; government activities in real estate finance; the secondary mortgage market; sources of funds; fiduciaries, semi-fiduciaries and non-fiduciaries; and instruments. (Prerequisite: RE 101 or permission of department head of Business Administration)

**RE 221 Real Estate Brokerage Management** **3-0-3**
This course will focus on the management techniques for small to medium-sized residential brokerage firms and will include discussion of the following: the nature and function of real estate brokerage, brokerage management concepts, employment agreements, personnel selection, the policy manual, listing operations, finance and appraisal of real estate, compensation of salespeople, sales management, financial control, the working environment, establishing and marketing the successful real estate brokerage. (Prerequisite: RE 101 or permission of department head of Business Administration)

**RE 222 Real Estate Investment and Taxation** **3-0-3**
A study of investment and taxation principles as they relate to the real estate industry including: the investment decision, risk and return, investment mathematics, the legal, financial and tax implications of real estate investment and investment criteria. (Prerequisite: RE 101 or permission of department head of Business Administration)

**RE 223 Commercial Real Estate** **3-0-3**
An examination of commercial real estate re: office buildings, retail stores, shopping centers, leases, improved real estate for the production of income, feasibility studies, location financing, marketing and investment analysis. As case study of nearby commercial projects will be examined. (Prerequisite: RE 101 or permission of department head of Business Administration)

**RE 225 Property Management** **3-0-3**
An examination of the growing profession of Property Management within the real estate industry, including the economics and performance objectives of the property manager. Differences in residential versus commercial management, shopping centers, office buildings, condos, mobile homes, resorts, hotels, etc., will be discussed. (Prerequisite: RE 101 or permission of department head of Business Administration)

**RE 227 Introduction to Real Estate Appraisal** **3-0-3**
This course is an examination of the principles and concepts of real estate valuation. Students will develop an understanding of the markets in which buyers and sellers interact. Topics include basic appraisal methodology, the three approaches to value – direct sales comparison, cost, and income. The concept of highest and best use will be examined. (Prerequisite: RE 101 or permission of the Department Head of Business Administration)

## Science

**SC 104 Astronomy and Space** **3-2-4**
An introductory course designed to acquaint students with the complexities of the universe. Topics covered include: stars and planets, nebulae, galaxies, black holes and origins of the universe. Past and current contributions of the space program are examined. The lab component consists of frequent outdoor observations, use of telescopes and scheduled trips to astronomical sites and planetariums.

**SC 107 Introduction to Meteorology** **3-2-4**
This course is an introduction to the fundamentals of weather and climate. Topics include observing the weather, physical properties and processes of the atmosphere, weather systems, hazardous weather, rudiments of forecasting, and climate. The course will utilize the American Meteorological Society's Internet-based On-Line Weather Studies curriculum, focusing on studying weather as it happens. The course requires regular student access to the Internet, ideally on a daily basis.

## Social Science

**SO 105 Introduction to Sociology** **3-0-3**
An introductory study of the concepts, principles, and applications of the social science method in general and of sociology in particular. A review of some of the crucial sociological problems of today, involving the relationship of the individual to society and groups of individuals to one another. Some topics included are culture, race, class, social mobility, and social change. Reference is made to the historical and economic forces in the U.S. that are responsible for some of these problems. *Available in Honors format.*

**SO 111 Education and Society** **3-0-3**
This course considers: (a) the manner in which social class, community, race, politics, the economy, etc., influence educational institutions; and (b) schools as formal organizations and the impact of education on occupation, income, social mobility and social change. In this multi-cultural and global course, education in other societies is also examined. (Prerequisites: SO 105; ED 105 is recommended)

**SO 205 Social Psychology** **3-0-3**
Social Psychology is an area of study within sociology which attempts to examine the relationship between the individual and society. Specific emphasis is on the social experience stemming from individuals' participation in social groups, interactions with others, and the emergence of social structures from these interactions. From this perspective, several major theories in social psychology are discussed such as socialization, identities and the self, attitudes and attitude change, social perception, attributions, social order and conformity, language and social communication, and social behavior in groups. (Prerequisite: one introductory course in sociology or psychology or permission of the department head of Social Science)

**SO 212 Intercultural Interactions and Cultural Learning** **3-0-3**
This course introduces basic theories and useful knowledge to increase productivity in intercultural interactions. With an emphasis on cultural learning, this course discusses important issues that affect the effectiveness of communication and interactions between people who do not share a common cultural background or experience. Classroom discussions and activities are aimed at guiding learners to examine and learn their own cultural values, which are usually taken for granted. Related areas such as stereotypes, ethnocentrism, assumptions and empathy are closely examined.

**SO 226 Special Topics in Social Science** **3-0-3**
This course will provide the opportunity to focus on topical issues encompassing the social and behavioral science fields (i.e., psychology, sociology, anthropology, philosophy, history, government and economics). New or specialized courses are presented under this listing and will encompass an interdisciplinary approach. Faculty present material not normally covered in regular course offerings. (Prerequisite: PY 105 or SO 105 or other social science course appropriate to the topic)

**SO 240 Marriage, Family and Personal Relationships** **3-0-3**
This course will examine concepts and issues associated with family life and personal relationships. A variety of social problems that impact personal relationships, marriage, and the family will be addressed that have resulted from social, cultural, political and economic changes in society. Such issues as gender role socialization, diversity of family forms, men and women in cross-cultural perspective, men and women in the work place, poverty and families, reproductive and parenting rights, sexuality, mate selection, the internal dynamics of relationships, domestic violence, marital dissolution, and future family trends will be examined throughout the semester. All together, such changes in the world outside the family have profound impact on what happens inside the family. Such changes have profound consequences on how individuals conduct their personal and social lives together. The questions that this course will raise and attempt to answer will hopefully enable us to live together in adulthood with considerably more ease than most currently experience. (Prerequisite: An introductory sociology or psychology course is recommended.)

**SO 250 Conflict Resolution in Modern Society** **3-0-3**
This course provides an overview of theories and research concerning the nature of conflict and methods for resolving conflict. The foundation of the course is social systems theory; the course examines conflicts among social institutions and conflicts among diverse populations. The effects of conflict upon the individual are considered. The course provides the student/practitioner with the theoretical framework for analyzing and resolving conflict. (This course does not meet the minimum Social Science requirement for NHTI's Associate degrees or Diploma programs.)

**SO 298 Study Abroad Experience** **3-0-3**
A travel experience abroad that combines the equivalent of three credits of classroom and field experience (at student expense) in a foreign country. Emphasis in the experience will be learning about the language and culture of a foreign country through lectures, seminars, workshops and field trips to various sites in the country. A paper or project will be required to document the learning experience.

# Sports Management

**SM 101 Introduction to Sports Management** **3-0-3**
This introductory course emphasizes basic management principles as they relate to the business of sports. Students are introduced to sports marketing, sports law, sports supervision, sports media, sports ethics, recreational sports management and other related areas. There is an emphasis on developing and improving communication skills. An overview is provided with regard to career opportunities in this field.

**SM 170 Sports Marketing** **3-0-3**
This course focuses on marketing issues as they relate to sports-related enterprises. A variety of marketing techniques and approaches are analyzed to broaden students' backgrounds in this area and to better allow them to develop effective and comprehensive sports marketing plans.

**SM 180 Public Relations and Advertising for the Sports Industry** **3-0-3**
This course provides a cross-disciplinary approach to a variety of promotional issues that sport managers routinely confront. Public relations and advertising professionals offer insights into how sports-related endeavors and businesses can raise public awareness about products and services. (Prerequisites: SM 101 and EN 101)

**SM 210 Sports and Fitness Facilities Management** **3-0-3**
This course exposes students to the many elements and dynamics associated with managing a sports or fitness facility. Students will visit a variety of structures, arenas, and facilities and will gain an understanding of what is required to develop and successfully administer and market such facilities.

**SM 211 Sports Tourism** **3-0-3**
Sport provides a significant impetus for travel in contemporary society, and this course focuses on the relationship between the sports and tourism industries. The study of sports tourism draws from the disciplines of psychology, sociology, geography, management, leisure, and recreation behavior. Typically, the course will include a five-day trip (at student expense) to a location such as Orlando, Florida, to visit world-class sports and convention facilities.

**SM 220 Sports Communication** **3-0-3**
This course seeks to provide the student with an appreciation of the unique dynamics associated with the sport communication field. Students will better understand the expectations associated with developing a sports story, a sports news release, and/or a sports opinion piece, via traditional print media or electronic media – radio, television, and/or the Internet. A review of journalistic ethics will be included. Students will gain first-hand experience with regard to producing television and radio broadcasts of live sporting events. (Prerequisites: EN 101 and EN 120; SM 101 strongly recommended)

**SM 225 Sports Law** **3-0-3**
This course focuses on the legal issues unique to the sports world and to sport managers. Numerous case studies and precedents are examined, as well as how they relate to current situations involving professional, intercollegiate, interscholastic and community sports and athletic activities.

**SM 250 Sports and Society** **4-0-4**
This course is designed to raise awareness with regard to the sociology of sport and how cultural practices in the world of sport can have significant social, economic, and political consequences. Discussion and research should give future sport managers a broader understanding of how sport impacts different groups of people in different ways throughout this country and beyond.

**SM 290 Sports Management Internship** **0-9-3**
This course allows students opportunities to experience real-life sports management situations "in the field." Internships are cooperatively sponsored by participating partners. The course approach and content can be

designed to match the needs of the sponsor with the desires of the student, as the student gets "hands on" opportunities to participate in the practical application of the sports management concepts and principles studied in the classroom. Students have completed successful internships with the Whittemore Center, Verizon Center, Planet Fitness, New Hampshire International Speedway, Concord Boys and Girls Club, Concord YMCA and many other local or regional facilities or organizations that are sports businesses.

## Travel and Tourism

**TR 101 Introduction to the Hospitality and Tourism Industry** **3-0-3**
An introductory course providing an overview of the structure and scope of the travel/tourism and hospitality industries. This course examines the components of the tourism industry: transportation, accommodation, food and beverage, and attractions. Other topics include the history, political, social and cultural impacts tourism has on local, state and global environments. A section of the course is devoted to the State of New Hampshire Tourism environment. Students well review marketing, motivation and other forces that draw guests to the State of New Hampshire. Students will be required to prepare a career-planning outline.

**TR 125 Travel Industry Procedures** **4-0-4**
This course examines the domestic and international airline/travel agent reservation procedures. Students will examine in detail the interrelationship of the components of travel: transportation, accommodation, attractions, food and beverage, tours and cruises. Reference materials such as the business travel planners, hotel guides, Amtrak guide and Thomas Cook Time Table will be reviewed. Fares and ticketing and the ARC/IATA ticketing documentation will be examined from a travel agent/airline perspective. Students will also examine sales and customer service relations. All students must develop and complete a foreign independent tour. (Prerequisite: TR 101 or permission of department head of Travel and Tourism)

**TR 210 E-Travel** **2-2-3**
This course surveys the impact technology has on the tourism/hospitality industry. Students will look at the components of the tourism industry—transportation, accommodation, attractions, and food and beverage—on the Internet. Students will look at the Internet from the perspective of a traveler as well as a potential vendor distributing information. Other areas surveyed are: legal issues; customer service; marketing; destination planning; and special interest. (Prerequisite: TR 125 or permission of department head of Travel and Tourism)

**TR 211 Sports Tourism** **3-0-3**
This course looks at the relationship between the sports and the tourism industries. Sport has become a motive for people to travel, leading to an industry that now focuses on sports attractions, events, and experiences available to tourists. The study of sports tourism draws upon the disciplines of sport psychology, sociology, geography, management, leisure and recreation behavior. As part of the course requirements, students will take a 3-4 night trip to a destination such as Orlando, Florida to visit world class sport and convention facilities. *This is an additional expense to the student.* This course is team taught by the sports management and travel/tourism programs.

**TR 225 Airline Reservation** **2-2-3**
This course provides students with hands-on experience with an airline reservation system. Students will check fees, flights, build a passenger name record (PNR) with car and hotel segments. Students will be using the Worldspan® airline system (TWA, NW, Delta). (Open to Travel majors only; prerequisite: TR 125 or permission of department head of Travel and Tourism)

**TR 226 Advanced Airline Reservation** **2-0-2**
This course reviews the airline reservation techniques learned from TR 225. Students will also examine advanced Worldspan® skills such as: queues, international travel and current Worldspan® formats. (Prerequisite: TR 225)

**TR 260 Principles of Corporate Travel** **3-0-3**
This course provides an overview of travel within the business community. Emphasis is on interpretation of business policies, procedures of a corporate travel agent, supervisor and manager in a travel or business environment. Additional topics include developing incentive, promotional meetings and convention travel. This course is not offered each year.

**TR 262 Tour Management** **3-0-3**
A course devoted to planning, guiding and escorting tours. Students will research and develop a tour by identifying components used in a tour such as hotels, meals, transportation and side trips. A budget will be developed to determine the break-even point for selling this trip to the public. Students will develop a marketing plan for tour promotion. Additional areas covered are group behavior, ethics and dealing with the unexpected disasters. This course will not be offered every year.

**TR 264 Cruise Sales** **3-0-3**
The student will gain a thorough understanding of the cruise industry. Knowledge of cruise lines, destination, amenities and marketing/sales is examined. Students' understanding of the relationship geography has to identification of cruise ports is also studied. Sales skills and qualifying the client in selecting of cruise is reviewed.

**TR 275 Travel Experience** **1-2-1**
Students enrolled in this class are expected to participate in a three to five day expanded familiarization travel experience. Students are required to write a day-to-day itinerary for the trip and a detailed report on the trip. Students are required to do a site, hotel and any applicable inspection. A minimum number of students is required to participate in this course. The additional cost will be assumed by the students enrolled in the course. *Allocation: 1 hour of lecture per week for 8 weeks plus 3 full days of field experience.* (Prerequisite: Permission of department head of Travel and Tourism)

**TR 280 Senior Travel Seminar** **2-0-2**
This course addresses current issues in the hospitality/tourism industry through discussion, reports (oral and written) and professional literature. Students will examine business ethics, professional development and case studies. Additional topics include resume preparation and interviewing techniques. Students will complete a portfolio.

**TR 290 Travel Internship** **0-9-3**
The internship offers the opportunity to put learned theory to practical application in a supervised work environment. Students are required to complete a minimum of 90 hours and complete a portfolio on the internship. Periodic conferences between the site supervisor and NHTI internship coordinators are scheduled to monitor and evaluate student progress. This course is limited to seniors and requires the approval of the Department Head. (Prerequisite: 2.5 GPA in major field courses and permission of department head of Travel and Tourism)

# PERSONNEL

**Christine Metcalf**

**NHTI Graphic Designer/Website Coordinator**

# DIRECTORY OF PERSONNEL

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James Gorman
Helmut Koch
John E. Poirier

## NEW HAMPSHIRE COMMUNITY TECHNICAL COLLEGE SYSTEM

### BOARD OF TRUSTEES - Paul Holloway, *Chair*

Wayne E. Cotton
Claudett Mahar
David C. Paquette
Ann M. Torr
Eve Eisenbise
Daniel McLeod
Walter R. Peterson
Kim Trisciani
William Grimm
Joshua E. Menard
Connie Roy-Czyzowski
Thomas E. Wilhelmsen

### Student Members

Sally Ann Benway
Joseph Copello

### Ex-Officio Members

Governor, John H. Lynch
State of New Hampshire

Commissioner, William G. Simonton
New Hampshire Community Technical College System

Deputy Commissioner, Charles Annal
New Hampshire Community Technical College System

President, Lynn Tolbert Kilchenstein
NH Technical Institute

President, Katharine Eneguess
NH Community Technical College
Berlin/Laconia

President, Lucille Jordan
NH Community Technical College
Nashua/Claremont

President, Thomas Wisbey
NH Community Technical College
Manchester/Stratham/Pease

Commissioner, Sean O'Kane
Department of Resources and Economic Development

Commissioner, Lyonel Tracy
Department of Education

## STATE OF NEW HAMPSHIRE

### GOVERNOR

John H. Lynch

### THE EXECUTIVE COUNCIL

District No. 1 - Raymond S. Burton
District No. 2 - Peter J. Spaulding
District No. 3 - Ruth L. Griffin
District No. 4 - Raymond J. Wieczorek
District No. 5 - Debora B. Pignatelli

# NHTI ADMINISTRATION

*Date of appointment appears in parentheses*

### President's Office

Barbara Lynn Tolbert Kilchenstein (1986)
*President*
B.A., Bridgewater College (Virginia);
M.A., University of Texas

Randi Provencal (1995)
*Administrative Assistant*
A.A.S., New Hampshire Community Technical College, Nashua

Richard Osborne (2003)
*Director of Communications*
B.A., St. Lawrence University

Pamela Halen-Smith (1981)
*Director of Information Technology System Integration*
A.S., New Hampshire Technical Institute

Alan Blake (2004)
*Director of Institutional and Alumni Development*
B.A., College for Lifelong Learning
M.Ed., Plymouth State University

### Academic Affairs

Pamela M. Langley (1981)
*Vice President of Academic Affairs*
B.A., University of New Hampshire;
M.S.H.S., Northeastern University

Joyce P. Myles, R.N. (1988)
*Associate Vice President of Academic Affairs*
B.S., B.A., State University of NY/Stony Brook;
M.A., New York University

Elizabeth M. Blankenstein (2005)
*Associate Vice President of Academic Affairs*
B.A., Westfield State College;
M.S., University of Bridgeport

Michele Karwocki (1989)
*Registrar*
A.S., New Hampshire Technical Institute

### Continuing & Corporate Education

Thomas A. Foulkes (1997)
*Vice President of Continuing & Corporate Education*
B.A., Salem State College;
M.S.T., University of Missouri;
Post Graduate Studies,
University of New Hampshire

Bonnie M. Lockwood (2003)
*Coordinator of*
*High School Initiatives/Outreach*
B.G.S., University of New Hampshire;
M.S., New Hampshire College

Kathleen Moore (2000)
*Director, Center for Training and Business Development*
B.S., Fitchburg State College;
M.Ed., Boston College

Alison Goodrich Richardson (1985)
*Institute Counselor-Continuing Education*
B.A., University of New Hampshire;
M.Ed., Plymouth State University

Linda Schmidt (1981)
*Institute Counselor-Continuing Education*
B.A., Fairleigh Dickinson University;
M.Ed., Florida Atlantic University

### Student Affairs

Stephen P. Caccia (1989)
*Vice President of Student Affairs*
B.A., New England College;
M.Ed., Plymouth State University

Anne Breen (1989)
*Director of Campus Safety*
Police Officer Standard of Training/California;
Criminal Justice Studies,
Northeastern University

Jason S. Bishop (2000)
*Chief Security Officer*
A.S., New Hampshire Technical Institute

Patricia M. Collins (1990)
*Director of Wellness Center, Intramurals & Recreation*
A.S., Greenfield Community College;
B.S., Florida State University

Melissa DiBiasio (2005)
*Counselor*
B.A., Salem State College;
M.A., Liberty University

David Elderkin (1989)
*Institute Counselor/Career Counseling and Placement*
B.S., Edinboro University of Pennsylvania;
M.Ed., Edinboro University
of Pennsylvania

Gyme Hardy (1998)
*Director of Student Development and*
*Counseling Services*
B.S.W., University of New Hampshire;
M.S.H.S., New Hampshire College;
Ph.D., Columbia Pacific University

Charles Lloyd (2002)
*Coordinator of Campus Activities and*
*Community Service Programs*
A.S., Keene State College;
B.S., Keene State College

### Enrollment Management

Lynne Birdsall Bennett (1995)
*Associate Vice President for Enrollment Management*
B.A., Union College, New York;
M.Ed. in Counseling,
University of New Hampshire

Francis P. Meyer (1975)
*Director of Admissions*
B.A., St. Anselm College;
M.Ed., University of New Hampshire

Denine Garnett (2003)
*Admissions Counselor*
B.A., University of New Hampshire;
M.A.T., New York University

### Financial Aid

Sheri Gonthier (2000)
*Director of Financial Aid*
A.S., New Hampshire Technical Institute;
B.S., Southern New Hampshire University

### Budget and Administration

Melanie Kirby (1998)
*Chief Financial Officer*
A.A.S., New Hampshire Community Technical College/Nashua

Marsha Bourdon (1996)
*Bursar*
A.S., New Hampshire Technical Institute

Alyssa M. LaBelle (2004)
*Human Resource Assistant*
B.A., University of New Hampshire;
Graduate Certificate,
Southern New Hampshire University

### Academic and Administrative Computing

Dexter S. Howe (1987)
*Director of Academic and Administrative Computing*
A.A.S., New Hampshire Technical Institute;
Northeastern University

### Learning Center

Deborah R. Carley (1990)
*Associate Professor/Director, Learning Center*
B.A., Trinity College;
M.Ed., Plymouth State University

Beverly Boggess (1999)
*Coordinator of Disabilities Services*
B.S., Bowling Green State University;
M.Ed., Kent State University;
Ph.D., Kent State University

Ruth M. Heath (1999)
*Assistant Professor of Mathematics/*
*Computer Learning Lab Coordinator*
B.S., Allegheny College of Pennsylvania;
M.S., Nova Southern University

### Library

Stephen Ambra (1996)
*Director of Learning Resources*
B.A., MacMurray College;
M.A., Governor's State University;
M.S., Simmons College;
J.D., Franklin Pierce Law Center

### Cross Cultural Education

Kunyu Bu-Zielinski (1999)
*Director of Cross-Cultural Education*
Undergraduate: Shanghai Teachers' University, China;
M.Ed., University of Minnesota;
Ph.D., University of Minnesota

Dawn Higgins (2001)
*English as a Second Language Coordinator*
B.A., University of New Hampshire;
Teaching Certification,
NH-English as a Second Language;
M.A., University of New Hampshire

# FACULTY

*Date of appointment appears in parentheses*

Lynnea B. Adams, CDA, BA (1998)
*Assistant Professor of Dental Hygiene*
B.A., Alfred University

Maryanne S. Adams (1992)
*Professor of Travel and Tourism*
*Department Head, Hospitality Management*
B.A., Hood College;
M.S., New Hampshire College;
M.B.A., Plymouth State University

Priscilla A. Anderson, R.N. (2003)
*Assistant Professor of Nursing*
*Practical Nursing Program*
B.S., University of New Hampshire

Robert Arredondo (1997)
*Professor of Mechanical and Manufacturing Engineering Technology*
*Department Head, Mechanical and Manufacturing Engineering Technology*
A.A.S., New Hampshire Technical College/Manchester;
B.S.M.E.T., M.S.M.E, University of Massachusetts at Lowell

Kevin Barry (1993)
*Professor of Diagnostic Medical Sonography*
*Department Head, Diagnostic Medical Sonography and Radiologic Technology*
A.S., Springfield Technical Community College;
B.S., University of Oklahoma;
M.Ed., University of New England
RT(R), RDMS, RDCS

Sandra Wall Beliveau (1983)
*Professor of Radiologic Technology*
A.S., New Hampshire Technical Institute;
Certificate of Registration, American Registry of Radiologic Technologists;
B.S., College for Lifelong Learning
RT(R)

Catherine Brock, RDH, BS (2003)
*Assistant Professor of Dental Hygiene*
A.S., New Hampshire Technical Institute;
B.S., College for Lifelong Learning

Edward Boulay (1970)
*Professor of Biological Sciences*
A.B., M.S., University of New Hampshire;
D.Ed., Pennsylvania State University

Nancy L. Brubaker (1986)
*Professor of Paramedic Emergency Medicine*
*Department Head, Paramedic Emergency Medicine*
A.S., Nursing, Regents College;
A.S., New Hampshire Technical Institute;
B.S., Keene State College;
M.Ed., Plymouth State University;
Registered Paramedic, Registered Nurse, CEN

Iris M. Bucchino (2003)
*Associate Professor of General Studies*
B.A., New York University;
M.A.T., Manhattanville College;
MGE Certificate, Mercer University

Thomas Caldon (1987)
*Associate Professor of Computer/Electronic Engineering Technology*
A.S., New Hampshire Technical Institute;
B.S.E.T., University of New Hampshire

Roderic Caron, DDS (1998)
*Professor of Dental Auxiliaries*
B.A., St. Anselm College;
D.M.D., Tufts University School of Dental Medicine

Donna Clougherty, R.D.H. (1987)
*Professor of Dental Auxiliaries*
*Department Head, Dental Auxiliaries*
Diploma, Forsyth School;
A.S., Northeastern University;
B.A., Notre Dame College;
M.Ed., Plymouth State University

Jane Cooke (1990)
*Professor of English/General Studies*
B.A., Middlebury College;
M.A.T., Brown University;
M.Ed., McGill University

Daniel J. Cronin (1984)
*Professor of Mathematics*
B.A., Merrimack College;
M.Ed., Northeastern University

Kathleen Rossetti Curran (1981)
*Professor of Human Service*
*Department Head, Human Service and Addiction Counseling*
B.S., University of Bridgeport;
M.Ed., Notre Dame College

Craig W. Cushing (1968)
*Professor of English*
B.Ed., Keene State College;
M.Ed., Keene State College

Lynn E. Darnell, *Professor of Computer/Electronic Engineering Technology* (1987)
B.S.E.E., University of Nebraska;
M.S.O.E., University of New Hampshire

Meurig T. Davies (1988)
*Professor of Manufacturing Engineering Technology*
B.S., University of Wales, Cardiff;
M.S., University of Birmingham, England

Ray Demko, R.T. (T) (2005)
*Assistant Professor of Radiation Therapy*
A.A., DeAnza College;
B.A., San Francisco State University

Ellen Dokton (1990)
*Professor of Education*
B.A., Goddard College;
M.A., New York University

Kathleen Dunn Dotter (2003)
*Associate Professor of Social Science*
B.A., West Virginia State College;
MSW, University of Minnesota-Duluth

Barbara Dunn, R.N. (1992)
*Professor of Nursing*
A.S., New Hampshire Technical Institute;
B.S., New Hampshire College;
M.S., Lesley College;
M.S., University of New Hampshire

Kelly Moore Dunn (2003)
*Professor of Education*
*Department Head, Education*
B.S., The College of St. Rose;
M.Ed., Notre Dame College

Cathy Eaton (1993)
*Professor of English*
B.A., Smith College;
M.A., Middlebury College

B. David Edwards (2002)
*Associate Professor of English*
B.S., Babson College;
M.A., University of New Hampshire

Judy Figueroa, A.R.N.P. (2004)
*Professor of Nursing*
A.D.N., Lake Sumter College, Florida
B.S., Plymouth State College
M.S., Rivier College
Graduate Certificate Psychiatric Nursing, Rivier College

Eileen Fitzsimmons (1995)
*Professor of Social Sciences*
*Department Head, Social Sciences*
A.A., Suffolk Community College;
B.A., Rivier College;
M.S., Nova University;
Ph.D., Boston College

Madelyn E. Foulkes (1986)
*Professor of Information Technology*
B.S., Salem State College

Lindsay Freese (1999)
*Professor of Human Service*
B.A., New England College;
M.Ed., Antioch/New England Graduate School

Jennifer Galbraith (2002)
*Associate Professor of Mathematics/Physics*
B.S., North Carolina State University;
M.S., University of Wisconsin

Connie Mae George, R.D.H., C.D.A. (1978)
*Professor of Dental Auxiliaries*
A.S., New Hampshire Technical Institute;
B.S., Plymouth State University;
M.Ed., University of New Hampshire

Joseph J. Gula (1989)
*Professor of Business Administration*
B.A., University of New Hampshire;
M.B.A., Rivier College

William J. Halacy (2001)
*Professor of Criminal Justice*
*Co-Department Head, Criminal Justice*
B.A., State University of New York College of Fredonia;
M.A., State University of New York at Albany

Gale Hall (1998)
*Professor of Early Childhood Education*
*Department Head, Early Childhood Education*
B.S., University of Connecticut;
M.A., Fairfield University

Lynn P. Hedge (1989)
*Professor of Business Administration*
*Department Head, Accounting*
B.A., Notre Dame College;
M.S., New Hampshire College

Karen Wynn Herrin, R.D.H. (1992)
*Professor of Dental Auxiliaries*
B.S., University of Iowa;
M.Ed., Plymouth State University

Paul Hogan (1999)
*Associate Professor of Sports Management*
*Athletic Director*
B.S., Plymouth State University;
M.Ed., Plymouth State University

Deborah A. Holland (1977)
*Professor of English*
*Department Head, General Studies, Health Science and Liberal Arts*
B.A., Mount Holyoke College;
M.A., University of New Hampshire

Lucinda Hope (2004)
*Professor of Mathematics/Physics*
B.S., Marietta College;
M.Ed., Ohio University

Sterling W. Hough (2001)
*Professor of Broadband Networking and Communications Technology/Computer Engineering Technology/Electronic Engineering Technology*
*Department Head of Broadband Networking and Communications Technology/Computer Engineering Technology/Electronic Engineering Technology*
Associate in Engineering Technology, New Hampshire Technical Institute;
B.S., University of Lowell;
M.S., University of Lowell

Deborah L. Houston, RN, ARNP (2002)
*Professor of Nursing*
B.S., University of New Hampshire;
M.S., University of New Hampshire

Martha A. Hunt (1985)
*Professor of Business Administration*
*Department Head, Business Administration and Real Estate*
B.S., University of New Hampshire;
Graduate Bank Administration Institute, School of Banking, University of Wisconsin

Daniel C. Huston (1997)
*Professor of English*
B.A., University of New Hampshire;
M.S., University of New Hampshire

Patricia Hutchins, A.R.N.P. (1987)
*Professor of Nursing*
Diploma, Johns Hopkins Hospital;
B.S.N., St. Anselm College;
M.S.N., Boston College;
Certificate in OB/GYN, Harvard Medical School and Boston College

Jonathan Hutchinson (2001)
*Professor of Information Technology*
B.S., University of North Dakota;
M.Ed., Harvard University

Martin E. Jean (1991)
*Professor of Paramedic Emergency Medicine*
A.S., New Hampshire Technical Institute;
B.S., Springfield College;
M.Ed., Plymouth State University;
Registered Paramedic

Pamela Kallmerten, ARNP (1999)
*Professor of Nursing*
B.S.N., Colby Sawyer College;
M.S.N., Northeastern University

Susan Kenna, RN, FNP (2004)
*Professor of Nursing*
*LPN Program Coordinator*
B.S.N., Cornell University;
F.N.P., University of Southern Maine;
M.S., Rivier College

Liaquat I. Khan (2002)
*Professor of Architectural Engineering Technology*
*Department Head, Architectural Engineering Technology*
B.Arch., University of Engineering & Technology, Pakistan;
M.Arch., University of Nebraska

Richard S. Kingston, D.V.M., Ph.D. (2001)
*Professor of Biological Sciences*
*Department Head, Chemistry and Biological Sciences*
B.S., D.V.M., Cornell University;
M.S., Ph.D., Colorado State University

Nancy Labore, RN (2003)
*Professor of Nursing*
A.S., New Hampshire Technical Institute;
B.S., University of New Hampshire;
M.S, University of New Hampshire

Frederick Lance (1998)
*Professor of Information Technology*
B.S., Franklin Pierce College;
B.S., Plymouth State University

Patrick W. Lanzetta, MD FACEP (2000)
*Medical Director of Paramedic Emergency Medicine Program*
B.S., St. John's University;
M.D., University of Monpellier, France
ECFMG, ACLS, ATLS
Board of Directors, ACEP New Hampshire Chapter

Thomas Laurie (2001)
*Professor of Information Technology*
*Department Head, Information Technology*
B.S. in Mathematics, United States Air Force Academy;
B.S. in Computer Science, United States Air Force Academy

Karen Lavallee, ARNP (1997)
*Professor of Nursing*
A.D.N., NH Technical Institute;
B.S.N., University of New Hampshire;
M.S., F.P.N., University of New Hampshire

Paul Leedham (1982)
*Professor of Architectural Engineering Technology*
B.S., New England College

Janice Lenehan (2004)
*Professor of Nursing*
B.S.N., Saint Anselm College;
M.S.N., Boston University

Rachel R. Leo, RDH, MA (2003)
*Associate Professor of Dental Hygiene*
A.S., Westbrook College;
B.A., University of Southern Maine;
M.A., Connecticut College

Diana Levine (1985)
*Professor of English*
*Department Head, English*
B.S., Ohio State University;
M.S., City University of New York

Alan G. Lindsay (2000)
*Professor of English*
B.A., St. Michael's College;
M.A., University of Maine-Orono;
M.A., University of Notre Dame;
Ph.D., University of Notre Dame

Mary E. Lloyd-Evans (2000)
*Professor of General Studies and Mathematics*
B.Sc., University College of Swansea, Wales, U.K.;
Post-Graduate Certificate, Birmingham University, England;
M.Ed., Lesley College

Stanton E. Lockwood (2000)
*Professor of Mathematics*
B.A., Eastern Nazarene College;
M.S., Ohio University

Jean Magee (2004)
*Assistant Professor of Dental Hygiene*
A.S., New Hampshire Technical Institute;
B.S., College for Lifelong Learning

Katrina Magee (2004)
*Professor of Dental Hygiene*
B.S., West Virginia University;
M.S., Old Dominion University

Lisa Malfait (2002)
*Professor of Dental Auxiliaries*
A.S., New Hampshire Technical Institute;
B.S., New England College;
M.Ed., Plymouth State University

Melanie Martel (1992)
*Professor of Reading/General Studies*
B.A., Tufts University;
M.Ed., Notre Dame College

Judy Maurer, R.N. (1990)
*Professor of Nursing*
B.S.N., State University of New York/Plattsburg;
M.S.N., University of Virginia/Charlottesville

Anni McLaughlin (2002)
*Associate Professor of English/Communications*
B.S., University of Texas/El Paso;
M.A., University of Texas/El Paso

Craig M. Meservey (2002)
*Professor of Biology*
B.S., University of New Hampshire;
M.S., University of New Hampshire

Mehrdad Meskoob (2000)
*Professor of Mathematics/Physics*
B.S., National University of Iran;
M.S., Northeastern University;
Ph.D., Northeastern University

Anne M. Metz, R.D.H., C.D.A. (1986)
*Professor of Dental Auxiliaries*
B.S., University of Michigan;
M.Ed., Washington University

Michael Moffett (1994)
*Professor of Sports Management*
*Department Head, Sports Management*
B.S. and M.Ed., Plymouth State University

Nancy B. Moffett (1996)
*Professor of Radiologic Technology*
A.S., New Hampshire Technical Institute;
B.S.., Plymouth State University
RT(R)(CT)(M)

Laura Z. Morgan, CPA (2002)
*Professor of Accounting*
B.S., University of New Hampshire;
M.B.A., New Hampshire College

Thomas Neal (1996)
*Associate Professor of Real Estate and Paralegal Studies*
B.S., St. John's University;
J.D., St. John's University

Neil Nevins (1992)
*Associate Professor of Social Science*
B.A., Depauw University;
M.A., University of Connecticut;
A.B.D., University of Connecticut

Karen Ann Noonan, R.N. (1996)
*Professor of Nursing*
B.S.N., College of Mount St. Joseph-on-the-Ohio;
M.S., Boston University;
Post Graduate, Boston College,
Boston University

Stephen O'Donnell (1994)
*Professor of Criminal Justice*
B.S., M.A., University of Lowell;
M.A., University of Massachusetts Lowell;
Graduate Certificate, University of Massachusetts

Jessana Palm (2003)
*Assistant Professor of Biology*
B.S., Marlboro College;
M.S., Antioch New England Graduate School

Anita Pavlidis, RN (1989)
*Professor of Nursing*
*Department Head, Nursing*
Diploma, St. Mary's School of Nursing;
B.S.N., Salem State College;
M.S., Boston University

Elizabeth E. Pedersen, C.C.S.W. (1995)
*Professor of Human Service*
B.A., University of New Hampshire;
M.S.W., Boston University

Stacey Peters (2005)
*Department Head, Paralegal Studies*
B.A., Alfred University;
Certificate Paralegal Studies,
Rivier College

James A. Pietrovito (1996)
*Professor of Social Science and Education*
B.A., Lycoming College;
M.Ed., University of Vermont;
C.A.G.S., University of Vermont;
Ed.D., Vanderbilt University

Deborah Remillard (1998)
*Associate Professor of Information Technology*
B.S., Plymouth State University;
M.B.E., New Hampshire College

Shirley Rennie, A.R.N.P. (1996)
*Professor of Nursing*
*Nurse Practitioner*
A.D.N., New Hampshire Technical Institute;
B.S.N., Rivier College;
M.S., F.N.P., Rivier College

James W. Rowe, Sr. (2001)
*Professor of Criminal Justice*
*Co-Department Head, Criminal Justice*
B.S., St. Anselm College;
M.P.A., Golden Gate University

Stephen D. Ryan, P.E. (1986)
*Professor of Manufacturing and Mechanical Engineering Technology*
B.S.M.E., University of New Hampshire;
M.S.M.E., Northeastern University

William Perry Seagroves (1985)
*Professor of Physics and Chemistry*
B.S., University of New Hampshire;
M.S., University of New England

Herbert A. Sewade, Jr. (1970)
*Professor of Radiologic Technology*
Lawrence General Hospital
School of X-Ray Technology;
B.S., Alderson-Broaddus College;
License, New York State
Department of Health
RT (R)

William D. Shurbert (2002)
*Associate Professor of Information Technology*
A.S., New Hampshire Technical Institute;
B.S., Southern New Hampshire University

Terrance L. Simkin (1987)
*Professor of Computer/ Electronic Engineering Technology*
B.S.M.E., California Maritime Academy;
M.B.A., California State University

Susan Stacey (2001)
*Director, Child and Family Development Center*
Diploma, Modern Montessori;
Certification, Early Childhood and
Family Development Center, Nova Scotia;
B.A., Mount Saint Vincent University (Nova Scotia)

Patricia A. Stone, RN (2002)
*Professor of Nursing*
A.D.N., Palm Beach Junior College;
B.S.N., Florida Atlantic University;
M.S.N., Florida Atlantic University

Nathan B. Strong (1994)
*Associate Professor of Biological Sciences*
B.S., Virginia Polytechnic
Institute and State University;
M.S., George Mason University

Linda S. Tasker, A.R.N.P. (1989)
*Professor of Nursing*
B.S., University of Vermont;
M.S.N., Vanderbilt University;
Certified Family Nurse Practitioner

Barbara A. Thurston, R.N. (1986)
*Professor of Nursing*
B.S.N., St. Anselm College;
M.S., Texas Women's University

Amy Carson VonKadich (2003)
*Professor of Radiation Therapy*
A.S., Seminole Community College;
B.S., University of Central Florida;
M.Ed., University of Central Florida
M.Ed. R.T.(T)

John Wakelin (1999)
*Professor of Information Technology*
B.S., Rensselaer Polytechnic Institute;
M.S.B.A., Boston University

Maryellen Walker, R.N. (1994)
*Professor of Nursing*
B.S.N., Seton Hall University;
M.S., Boston College

R. Stuart Wallace (2002)
*Associate Professor of History*
B.A., Lehigh University;
M.A., University of New Hampshire;
Ph.D., University of New Hampshire

Loretta Welts (1998)
*Professor of Mathematics/Physics*
B.A., Olivet College;
M.S., The College of William and Mary

Matthew Wood (2001)
*Professor of Mathematics*
*Department Head, Mathematics/Physics*
B.S., University of New Hampshire;
M.S., University of Colorado

Patricia Yokell (1989)
*Professor of Biological Sciences*
A.A.S., Nassau Community College;
B.S., Boston College;
M.S.T., Boston College

Stanley Zielinski (1994)
*Professor of Information Technology*
A.M., Dartmouth College;
B.S., University of Vermont;
Ph.D., Rensselaer Polytechnic Institute

# ACADEMIC CALENDAR

## Fall Semester 2005

| | | | |
|---|---|---|---|
| **September** | 5 | Residence Halls open - new & returning students | 12:00 noon |
| | 5 | Labor Day holiday - *Institute closed* | |
| | 6 | Day and evening classes begin | |
| | 10 | Weekend classes begin | |
| | 20 | All NHTI Convocation | |
| | 20 | Activities Fair and Campus Barbecue | |
| **October** | 10 | Columbus Day - *All classes meet* | |
| | 28 | Mid-Semester Warnings available on Student Information System | |
| | 28 | Last day to resolve "I" grades from Spring and Summer 2005 semesters | |
| | 30 | Daylight Savings Time ends; set clocks *back 1 hour* | |
| **November** | 6 | Open House | 12:00 Noon-2:30 pm |
| | 7 | Last day to drop a course or withdraw with a "W" grade | |
| | 7 | 60% completion for Financial Aid requirements | |
| | 11 | Veterans' Day holiday - *Institute closed* | |
| | 23 | Residence Halls close | 5:00 pm |
| | 23 | No evening classes | |
| | 24-25 | Thanksgiving holiday - *Institute closed* | |
| | 26-27 | No Weekend classes | |
| | 27 | Residence Halls re-open | 12:00 noon |
| | 28 | Classes resume | 8:00 am |
| **December** | 16 | Day classes end | |
| | 19-22 | Day Final Exam period *(snow date—December 23)* | |
| | 22 | Evening classes end | |
| | 22 | Residence Halls close | 7:00 pm |
| | 26 | Christmas holiday - *Institute closed* | |
| | 30 | Grades available on Student Information System | |

# ACADEMIC CALENDAR

## Spring Semester 2006

| | | | |
|---|---|---|---|
| **January** | 2 | New Year's holiday - *Institute closed* | |
| | 6 | Academic Standards Committee | |
| | 9 | Open House *(Snow date - January 10th)* | 5:00 - 7:00 pm |
| | 11 | New Student Orientation/Registration | |
| | 11 | Final Registration for returning students | |
| | 16 | Residence Halls open | 12:00 noon |
| | 16 | Martin Luther King Day - *Institute closed* | |
| | 17 | Day and Evening classes begin | |
| | 21 | Weekend classes begin | |
| **February** | 20 | Presidents' Day holiday - *no day classes; evening classes meet* | |
| **March** | 10 | Residence Halls close | 5:00 pm |
| | 10 | Mid-Semester Warnings available on Student Information System | |
| | 10 | Last day to resolve "I" grades from Fall 2005 semester | |
| | 13-19 | Spring Break; no day, evening or weekend classes | |
| | 19 | Residence Halls re-open | 12:00 noon |
| | 20 | Classes Resume | 8:00 am |
| | 27 | Last day to drop a course or withdraw with a "W" grade | |
| | 27 | 60% completion for Financial Aid requirements | |
| **April** | 2 | Daylight Savings Time begins; *set clocks ahead 1 hour* | |
| | 19 | System Symposium Day - no day classes; evening classes meet | |
| | 25 | Awards Day | 12:00 Noon |
| **May** | 5 | Day classes end | |
| | 8-11 | Day Final Exam period | |
| | 11 | Evening classes end | |
| | 11 | Residence Halls close | 5:00 pm |
| | 16 | Academic Standards Committee | 9:00 am |
| | 17 | Grades available on Student Information System | |
| | 19 | Commencement | 10:00 am |

## Summer Semester 2006

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|---|---|---|---|
| **May** | 22 | Summer Day Division classes begin | |
| | 29 | Memorial Day holiday - *Institute closed* | |
| | 30 | Summer Continuing Education Day Session I begins | |
| | 30 | Summer Evening classes begin | |
| **June** | 12 | Radiologic Technology program begins | |
| **July** | 4 | Independence Day holiday - *Institute closed* | |
| | 5 | Summer Continuing Education Day Session II begins | |

# ORGANIZATION AND ADMINISTRATION

New Hampshire Technical Institute is a postsecondary educational institution established by the Legislature in 1961 to fulfill a statewide mission. It is a part of the New Hampshire Community Technical College System, which is directed by a Board of Trustees and a Commissioner.

The System includes four regional community technical colleges, the New Hampshire Police Standards and Training Academy and the Christa McAuliffe Planetarium.

**NEW HAMPSHIRE TECHNICAL INSTITUTE**
31 College Drive
Concord, NH 03301-7412
Telephone: (603) 271-6484 or 1-800-247-0179

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**NH COMMUNITY TECHNICAL COLLEGES AT:**

**Berlin/Laconia**
2020 Riverside Drive • Berlin, NH 03570
Telephone: (603) 752-1113

379 Belmont Road • Laconia, NH 03246
Telephone: (603) 524-3207

**Nashua/Claremont**
505 Amherst Street • Nashua, NH 03063
Telephone: (603) 882-6923
or (603) 882-7022

1 College Drive • Claremont, NH 03743
Telephone: (603) 542-7744

**Manchester/Stratham/Pease**
1066 Front Street • Manchester, NH 03102
Telephone: (603) 668-6706

277 Portsmouth Avenue • Stratham, NH 03885
Telephone: (603) 772-1194

320 Corporate Drive • Portsmouth, NH 03801
Telephone: (603) 334-6306

■

**NH Police Standards and Training Academy**
17 Institute Drive • Concord, NH 03301
Telephone: (603) 271-2133

■

**Christa McAuliffe Planetarium**
3 Institute Drive • Concord, NH 03301
Telephone: (603) 271-7827

# CREDITS

*Thank you to the entire New Hampshire Technical Institute community for its cooperation, contributions and editorial assistance.*

## Editor:

Lynne Birdsall Bennett
*Associate Vice President for Enrollment Management*

## Graphic Design and Layout:

Christine Metcalf
*Graphic Designer*

## Photography:

Megan Burk
Peter Finger
Geoffrey Forester
Martha Hunt
Christine Metcalf
Richard Osborne
Shannon Reid
Snap 2 Action Photography
Art Swenson

# DIRECTIONS TO NEW HAMPSHIRE TECHNICAL INSTITUTE

**From Points North or South**
I-93, Exit 15 East to I-393 to Exit 1 and follow signs.

**From Points West**
I-89 to I-93 North to Exit 15 East to I-393 to Exit 1 and follow signs.

**From Points East**
Route 4 to I-393 to Exit 1 and follow signs.