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## Message From the President



Dr. William G. Simonton, Jr. President

In May of 2003 New Hampshire Technical Institute graduated the largest class in its history, with over 500 students receiving degrees or diplomas. Our graduates go into the community as skilled professionals, fueling New Hampshire's economic growth. Others choose the path of continuing education, building on foundations established at NHTI to earn advanced degrees.

As we move into the $21^{\text {st }}$ century, NHTI continues to thrive. I was a member of the faculty when the college opened its doors in 1965, and I have had the privilege of witnessing all the wonderful growth that has occurred during the past 38 years. Enrollment has steadily increased to over 3600 students, up from the 256 who were enrolled during our first year of operation. Today we offer 30 Associate degrees as well as numerous certificate and diploma programs, in fields that keep pace with our students' interests and with changing workforce needs. We offer courses days, evenings, and in many, alternative formats, such as on-line and compressed time formats.

In recent years we have combined traditional sources of support with exciting new partnerships with industry, energizing our academic programs and fueling the Institute's growth. We have followed up on our expanded accreditation status, awarded in 2001 by the Commission on Institutions of Higher Education, to strengthen transfer relationships with other institutions to provide more transfer options for our students. Several of these options take the form of dual admission programs, where our students can take advantage of seamless transfer from NHTI to baccalaureate institutions.

Even though we're larger than ever, we seek to retain the small college sense of community that has always characterized our institution. You will know your faculty and they will know you. Your success will be their priority.
While this catalog provides a wealth of information about NHTI, there is no substitute for an actual visit to our campus, located on over 240 acres along the Merrimack River in Concord. Please call our Admissions Office and schedule a time to see the campus, and hear how NHTI can be part of your future.

## 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 will strengthen NHTI's position in the state's higher education community and extend 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 50 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 many 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 new 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 new 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's, Bursar's and Financial Aid offices are all located near one another for convenient "onestop" assistance. In addition, the new 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 can 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 Student Center, planned for a 2004 opening, will allow further development of enrichment opportunities, such as expanded music, art and theater activities.

From one classroom building and one residence hall, the physical facilities have expanded to include four classroom buildings, three residence halls, the new 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, which was 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 $21^{\text {st }}$ century, the faculty, staff, and administration at NHTI have dedicated themselves to the college's Mission/Values/Vision Statement, most recently revised in June 2001, 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 the Institute and former, current or future students. Its contents are subject to revision at any time. The Institute 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 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 21202Telephone (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

Nursing - 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 1-800-669-9656, 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

Human Service - National Organization for Human Service Education (NOHSE)

## Memberships

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


## 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, the Institute 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 the Institute and its academic programs is based on a number of considerations. Waiver of any portion of either general Institute 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 the Institute 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 Institute; 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 the Institute before registering for classes.

NOTE: IT IS THE APPLICANT'S RESPONSIBILITY to request official transcripts of previous study be mailed directly to the ADMISSIONS OFFICE. These transcripts must be received prior to consideration of your 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
- Introductory Mathematics
- 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 indicted 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, p. 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:
3. The student has not taken any courses at NHTI for a period of at least 3 years from the last semester of attendance.
4. The student applies for Academic Amnesty at the time of admission.
5. 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.

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 \& 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 course requirements. While the grade received at NHTI will remain a part of the transcript, it will not be utilized in determining the student's Grade Point Average. See Program Residency Requirements, 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 $W a y{ }^{\circledR}$ 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 ${ }^{\circledR}$ 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 2003-2004 academic year. Costs are generally set in July for the following 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 2003-2004 Academic Year

|  | NH Resident | NERSP $*$ | Non-Resident |
| :--- | :--- | :--- | :--- |
| Tuition Deposit** | $\$ 100.00$ | $\$ 100.00$ | $\$ 100.00$ |
| Per Credit Cost | $\$ 133.00$ | $\$ 199.50$ | $\$ 306.00$ |

## Tuition rates are based on per credit bour cost.

## Fees

## ■ Comprehensive Fee ${ }^{* * *}$ :

 Day Division:Continuing Education Division:
$\$ 15.00$ per credit hour (maximum $\$ 255.00 /$ semester) $\$ 10.00$ per credit hour (maximum $\$ 170.00 /$ semester)

## - Fee For Lab/Clinic/Practicum/Co-Op/Internship:

A 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 101 A $\Leftrightarrow P$ I
(Lecture) 3 (Lab) 2 (Credit) 4
$4-3=1 \times 44=\$ 44$

- Orientation Fee: $\$ 25.00$

Graduation Fee: $\quad \$ 60.00$

## 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, 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 offcampus practicum or internship.)


## CHARGES ARE SUBJECT TO CHANGE WITHOUT NOTICE.

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## PAYMENT AND REFUND POLICIES

## Payment of Tuition and Fees

Tuition and fees are due prior to the beginning of each semester. Students with outstanding balances on their accounts will not be permitted to enroll in future semesters 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.

## NHTI Payment Plan

This program offers a low cost, flexible system for paying semester expenses out of current income through regularly scheduled payments during the semester. Instead of the usual large payments due at the beginning of each semester, students can budget educational costs in convenient installments. There is a $\$ 30.00$ charge per semester for this service. Details about this program are mailed to all new students. They may also be obtained from the Bursar's Office (Phone: 603-271-6309) or Continuing Education (Phone: 603-271-7122).

Please Note: All first time financial aid borrowers will be required to use this plan or pay in full prior to the beginning of the semester.

## 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.

After all financial obligations have been satisfied, students who wish to return to New Hampshire Technical Institute 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 New Hampshire Technical Institute. The student will then become eligible for the NHTI Payment Plan and Financial Aid Deferment using all awards except college workstudy.

## Institute 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 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 the Institute. 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 the Institute. NHTI considers New England Regional status to be a form of financial aid. For further information, contact a high school guidance counselor or the Institute Admissions Office.

## 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 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)

## FINANCIAL AID

## What is Student Financial Aid (SFA) ?

SFA is assistance for students enrolled at least half time in participating schools. It helps to cover educational expenses, including tuition and fees, room and board, books and supplies, and transportation. Most aid is needbased, 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 (603) 271-7135 and on the NHTI website at www.nbti.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 formally accepted in 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 Institute 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 scbool before the $60 \%$ point in a semester will have to repay a portion or all of their aid.


## Additional Grants, Loans and Scholarships

## All scholarships are awarded based on available funds. <br> * Awards are used to defray college expenses at NHTI. <br> \# Awarded at NHTI's Awards Day

## Agnes M. Lindsay Trust Scholarship

This scholarship is for students with financial need who are residents of towns with fewer the 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 Business Women's Association:

- must have business or professional career;
- awards based on need and scholastic standing;
- applications must be submitted by February 28th.


## 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 1 st.

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 usually in March.

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 nation-wide 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 100 hours of community service 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 a member of the Concord Dental Society; otherwise, the grant becomes a loan, which must be repaid.

## Delta Dental Grant

This grant 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).

## 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.
*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.

## *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 resident;
- minimum 2.5 GPA;
- must have completed freshman year;
- enrolled full-time for the upcoming fall semester.


## Jack Kent Cooke Foundation Scholarship (up to $\$ \mathbf{3 0 , 0 0 0}$ )

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 usually in March. Criteria include:

- have completed freshman credits by December;
- have a cumulative GPA of 3.3 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 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 and Radiologic Technology. 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 deadline.


## 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 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 15.


## *New Hampshire Valedictorian Scholarship

This is a two-year 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.

## *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 testing;
- 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.


## *Nursing Leveraged Grant/Loan

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.

## 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 ( $\$ 1,000$ ) <br> 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 entry 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 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 in February;
- application cover sheet available in the Financial Aid Office;
- deadline for application is March 1.


## *\# 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.

## War Orphan Benefits

Residents of New Hampshire age 16-25 whose veteran parent(s) died as a result of service in World War I, World War II, the Korean conflict or the Southeast Asian conflict and whose veteran parent(s) were legal residents of New Hampshire at the time of death are eligible to receive full tuition and a maximum of $\$ 250.00$ per year for room, board, books, and supplies. Information can be obtained at: The N.H. Postsecondary Education Commission, 2 Industrial Park Drive, Concord, NH 03301.

## Zonta Scholarship Award

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 .


## *NHTI Emergency Loans

Program
All programs
All programs
Criminal Justice
Dental
Electronic
EngineeringTechnology
Human Service
Nursing
Nursing
Paramedic
Emergency Medicine

## Loan Name

Dr. Paul Lieberman Book Loan
Lakes Region Scholarship Fund
Brandon Davis Memorial
Dr. Erwin Adams/
Robert Whittaker Memorial
Randy Pierce
Sandra Fernie Memorial
Mary Dryer Memorial
Suestia Robinson Memorial
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.

## Standards of Satisfactory Progress

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 quality and quantity of standards.

## 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*

| $1-13$ | 1.5 |  |
| :--- | :--- | :--- |
| $14-27$ | 1.7 |  |
| $28-40$ | 1.8 |  |
| $41+$ | 2.0 | (1.9 for students <br> who matriculated <br> prior to the Fall <br> 1995 semester) |

*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 (603-271-7135) to determine eligibility.

## Qualitative Probation and Ineligibility

Students who fail to meet the qualitative standards for satisfactory progress will be placed on satisfactory progress probation 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 probation 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 Associate Degrees, Certificates and Diplomas must complete a minimum number of credits each year to conform with satisfactory progress. Completed credits result in grades of $\mathrm{A}, \mathrm{B}, \mathrm{C}, \mathrm{D}, \mathrm{P}$ or PP. Grades of W, I, WP, NP, or AU do not fulfill the requirement.

For full-time and part-time students, the formula to determine the minimum number of credits required is as follows:

1. \# of credits in program of study $\times 150 \%=$ maximum $\#$ of credits student is allowed to attempt and receive aid.

## EXAMPLE: $\quad 72$ credits in program $\times 150 \%=108$

2. \# of credits in program of study
maximum \# of credits student is allowed to attempt and receive
$67 \%$ which is the percentage of credits attempted that student must complete each financial aid
semester

## EXAMPLE:

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

3. \# of credits student attempted during semester $\times 67 \%=\#$ of credits student must complete that semester

Credit hours attempted will be cumulative and will include all hours for which the student was enrolled as of the end of the ADD period.

## Quantitative Probation 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 probation 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 quantitative requirements. Otherwise, they must complete future semesters at their own expense until they regain eligibility for Title IV funds.

## Incomplete Grades

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.

## Repeated Courses

Repeated courses may be counted as part of a student's enrollment only when retaken because of prior failure or withdrawal.

## 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.

## 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.

## Course Withdrawal

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

## 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 th percentage point in the semester (please see date in the Academic Calendar), all of his/her Title IV funds are considered earned.

## PROGRAMS OF STUDY



## Note:

1. Refer to individual program pages for specific Admission requirements.
2. 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.

## BUSINESS PROGPAMS

## 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.

NHTI has transfer affiliations with four year institutions including:

- Daniel Webster College
- New England College
- Franklin Pierce College
- Plymouth State College

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).

| 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 |
| IS 166 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 |
| IS 265 Spreadsheets | 3 | 0 | 3 |
| MT 125 Finite Math | 4 | 0 | 4 |
| XX xxx Science Elective* | 3-4 | 0 | 3-4 |
|  |  |  | 16-18 |
| SUMMER SEMESTER (Optional) |  |  |  |
| \# AC 290 Accounting Internship | 0 | 9 | 3 |


| 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 |  |  | 67-73 |

\# 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. One year of college preparatory mathematics (Algebra I) with a grade of " $C$ " or better.
NHTI Alumni Profile

| Jeremy Seeley |
| :--- |
| Class of 2003 |
| Major: Accounting |


| Before graduating from NHTI with an as- |
| :--- |
| sociate 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 en- |
| couraged and supported to continue his |
| education. |

"Thankes 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 profes-
sors. 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.

## 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.

| FALL SEMESTER | CL | LAB CR |
| :---: | :---: | :---: |
| EN 101 English Composition | 4 | $0 \quad 4$ |
| \# GY 135 Destination Travel Geography I | 3 | 03 |
| IS 166 PC Applications | 3 | 03 |
| MT 100 Fundamental Mathematics with Applications* | 4 | $0 \quad 4$ |
| \# TR 101 The Tourism System | 3 | $\begin{array}{ll} 0 & \underline{3} \\ & 17 \end{array}$ |
| SPRING SEMESTER |  |  |
| BU 170 Principles of Marketing | 3 | 03 |
| EN 120 Communications | 3 | 03 |
| \# HR 115 Front Office Operations | 3 | 03 |
| \# HR 227 Legal Issues for the Hospitality Industry OR |  |  |
| BU 225 Business Law I | 3 | 03 |
| XX xxx General Education Elective | 3 | $0 \quad \underline{3}$ |
|  |  | 15 |


| FALL SEMESTER |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| AC | 101 | Accounting I | 3 | 0 | 3 |
| FL | xxx | Foreign Language+ | 3 | 0 | 3 |
| \# HR | 229 | Hotel Management and Operations | 3 | 0 | 3 |
| \# HR | 245 | Event, Meeting and Convention Planning 3 | 0 | 3 |  |
| XX | xxx | Science Elective** | $3-4$ | $0-2$ | $\underline{3-4}$ |

SPRING SEMESTER

| BU | 150 | Supervision | 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/Marketing | 3 | 0 | 3 |
| XX | xxx | General Education Elective | 3 | 0 | 3 |
| XX | xxx | Social Science Elective*** | 3 | 0 | $\underline{3}$ |
|  |  | TOTAL CREDITS |  | 17 |  |
|  |  | $\mathbf{6 4 - 6 5}$ |  |  |  |

\# Indicates major field courses.

* Students who bave completed high school Algebra I with a grade of "C" or bigher are advised to take MT 120 Contemporary College Mathematics or higher level math course. Students who have not completed bigh school Algebra I with a grade of "C" or higher should take MT 100. Note: the eight math courses, MT 103 through MT 115, do not meet graduation require-
ments for math. Students should contact their Department Head for appropriate course selection.
** 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.
+ 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 math requirement elsewhere on this page.

## Health 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.

## Management

The Business Administration-Management program is designed to prepare students for the day-to-day challenges in the dynamic field of 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.

NHTI has transfer affiliations with four year institutions including:

- Daniel Webster College
- Franklin Pierce College
- Plymouth State College
- Southern New

Hampshire University

- Rivier College

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).


## NHTI Faculty Profile

Laura Z. Morgan
Professor of Accounting
B.S., University of New Hamp-
shire
M.B.A., New Hampshire College

CPA New Hampshire
Professor Laura Morgan is a Certified Public Accountant who brings to NHTI over 15 years of teaching experience. Her skills in the classroom earned her the Association of Collegiate Business Schools and Programs Northeast Region Teaching Excellence Award.
"It is a pleasure to teach at NHTI where students, faculty and staff are allowed to grow in an atmosphere of camaraderie and mutual respect."

|  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | 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 |
| IS | 166 | PC Applications | 3 | 0 | 3 |
| MT | 123 | Intermediate Algebra | 4 | 0 | $\underline{4}$ |
|  |  |  |  |  | 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 | $\underline{4}$ |


| FALL SEMESTER |  |  |  |  |  |  |  |
| :--- | :---: | :--- | :--- | :--- | :---: | :---: | :---: |
| \# BU | 225 | Business Law I |  |  |  |  |  |
| \# BU | 250 | Principles of Finance | 3 | 0 | 3 |  |  |
| \# BU | 270 | Principles of Management | 4 | 0 | 3 |  |  |
| \# BU | 0 | 4 |  |  |  |  |  |
| \# BU | xxx | Business Elective* | $3-4$ | 0 | $3-4$ |  |  |
| EO | 101 | Macroeconomics | 3 | 0 | $\underline{3}$ |  |  |

## 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 | $\underline{3}$ |
|  |  |  |  | 15-17 |
|  | TOTAL CREDITS |  |  | 64-67 |

\# Indicates major field courses.

* Any BU, AC, IS 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. One year of college preparatory mathematics (Algebra I) with a grade of "C" or better.

## 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, management, marketing and related research skills, word processing and spreadsheets, economics, English and mathematics.

The first year of the program has offerings which are common to the Management degree. The second year allows students to choose their marketing emphasis through a selection of electives such as sales, marketing research, consumer behavior, and advertising.

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 fouryear colleges.

NHTI has transfer affiliations with four year institutions including:

- Daniel Webster College
- Franklin Pierce College
- Plymouth State College
- Southern New

Hampshire University

- Rivier College

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).


| FALL SEMESTER SECOND YEAR | CL LAB CR |  |  |
| :---: | :---: | :---: | :---: |
| \# BU 174 Principles of Sales | 3 | 0 | 3 |
| \# BU 225 Business Law I | 3 | 0 | 3 |
| \# BU xxx Business Elective* | 3 | 0 | 3 |
| EO 101 Macroeconomics | 3 | 0 | 3 |
| XX xxx Science Elective** | 3 | 0-2 | 3-4 |
|  |  |  | 15-16 |
| SPRING SEMESTER |  |  |  |
| \# BU 265 Marketing Research | 4 | 0 | 4 |
| \# BU 242 Business Ethics | 3 | 0 | 3 |
| \# BU xxx Business Elective*** | 3 | 0 | 3 |
| EO 102 Microeconomics | 3 | 0 | 3 |
| XX xxx Humanities/Fine Arts/ |  |  |  |
| Foreign Language Elective | 3 | 0 | 3 |

TOTAL CREDITS
\# Indicates major field courses.

* Any BU, AC, IS or RE course that is not a required course and department bead approval
** BI 100, CH 100 and PH 100 DO NOT meet this requirement
*** BU 261, BU 262, BU 280 or BU 295 and/or department head approval.


## 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. One year of college preparatory mathematics (Algebra I) with a grade of " $C$ " or better.


NHTI Alumni Profile
Holly Dunn
Class of 1997

Major: General Studies/ Marketing

Holly transferred to NHTI from Keene State College to study Business. After graduating from NHTI with an associate degree in General Studies and a Certificate in Marketing, Holly went on to New Hampshire College to earn her Bachelor's Degree in marketing. Currently, she is studying for her M.B.A. and working full time as a director of marketing.
"The small classes at NHTI gave me the opportunity to bave close contact with the faculty-I really valued their input. I also appreciated being able to takee all my general education courses, closer to bome and at a lower cost, before transferring to a four-year 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.

## 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

| AC | 101 | Accounting I |
| :---: | :---: | :--- |
| EN | 101 | English Composition |
| IS | 166 | PC Applications |
| MT | 100 | Fundamental Mathematics <br> with Applications* |
| \# RE | 101 | Fundamentals of Real Estate |

## SPRING SEMESTER

| AC | 102 | Accounting II | 3 | 0 | 3 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| EN | xxx | English Elective | 3 | 0 | 3 |
| \# IS | 162 | Real Estate Computer Applications | 2 | 2 | 3 |
| \# RE | 102 | Real Estate Marketing and Advertising | 3 | 0 | 3 |
| \# RE | 201 | Real Estate Internship I** | 1 | 10 | $\underline{4}$ |
|  |  |  |  | 16 |  |

## Health 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 

## Thomas Neal Real Estate

B.S., St. John's University J.D., St. John's University

Professor Neal came to NHTI in 1996 and has played a key role in establishing the Institute's degree program in Real Estate. He also is Department Head for the Paralegal Program.
'I love working at NHTI. The students are great here, as are the faculty, staff and administration. I look forward to coming to work bere each day!"

| FALL | SEMESTER |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| \# RECOND YEAR |  |  |  |  |  |
| \# RE | 220 | Real Estate Finance | 3 | 0 | 3 |
| \# RE | 202 | Real Estate Internship II** | 1 | 10 | 4 |
| XX | xxx | General Education Elective | $3-4$ | 0 | $3-4$ |
| PI | 242 | Contemporary Ethical Issues | 3 | 0 | 3 |
| XX | xxx | Social Science Elective*** | 3 | 0 | $\underline{3}$ |
|  |  |  |  |  | $16-17$ |

## 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 | 203 | Real Estate Internship III** | 1 | 12 | 5 |
| XX | xxx | Science Elective+ | 3 | 0 | $\underline{3}$ |

## TOTAL CREDITS

\# Indicates major field courses.

* Students who have completed high school Algebra I with a grade of "C" or bigher are advised to take MT 120 Contemporary College Mathematics or bigher level math course. Students who have not completed high school Algebra I with a grade of "C" or higher should take MT 100. Note: the eight math courses, MT 103 through MT 115, do not meet graduation requirements for math. Students should contact their Department Head for appropriate course selection.
** 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. No additional requirements
[^1]
## 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.

|  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |

## FALL SEMESTER

| \# AC | 102 | Accounting II | 3 | 0 | 3 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| \# BU | 270 | Principles of Management | 4 | 0 | 4 |
| \# BU | 225 | Business Law I OR |  |  |  |
| \# SM | 225 | Sports Law | 3 | 0 | 3 |
| EO | 101 | Macroeconomics OR |  |  |  |
| EO | 102 | Microeconomics | 3 | 0 | 3 |
| \# SM 210 | Sports and Fitness Facilities <br> Management | 3 | 0 | $\underline{3}$ |  |
|  |  |  |  | 16 |  |

## SPRING SEMESTER

| \# BU | xxx | Business Elective+ OR | 3 | 0 | 3 |
| ---: | :--- | :--- | :--- | :---: | :---: |
| SM 290 | Sports Management Internship | 0 | 9 | 3 |  |
| \# EN 120 | Communications | 3 | 0 | 3 |  |
| \# SM 250 | Sports and Society | 4 | 0 | 4 |  |
| SO | xxx | Social Science Elective++ | 3 | 0 | 3 |
| XX xxx | General Education Elective | $3-4$ | 0 | $\underline{3-4}$ |  |
|  |  |  |  | $16-17$ |  |
|  | TOTAL CREDITS |  | $\mathbf{6 4 - 6 6}$ |  |  |



# NHTI Faculty Profile 

Michael Moffett<br>Department Head, Sports Management

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

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 College, where he also earned a Master's Degree in Education. Besides teaching on the high school level and at Plymouth State College, 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 bigh-energy and people-centered sports industry. Students get broad exposure as to bow business, management, and marketting 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. One year of college preparatory mathematics (Algebra I) with a grade of " C " or better.

## Health 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.

## 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 |  |  |
| :--- | :--- | :--- |
| EN | 101 | English Composition |
| \# GY | 135 | Destination Travel Geography I |
| IS | 166 | PC Applications |
| MT | 100 | Fundamental Mathematics |
|  |  | with Applications* |
| \# TR | 101 | The Tourism System |

## SPRING SEMESTER

| BU | 170 | Introduction to Marketing | 3 | 0 | 3 |
| ---: | :--- | :--- | :--- | :--- | :--- |
| EN | 120 | Communications | 3 | 0 | 3 |
| \# GY | 137 | Destination Travel Geography II | 3 | 0 | 3 |
| \# HR | 227 | Legal Issues for the Hospitality |  |  |  |
|  |  | Industry OR |  |  |  |
| BU | 225 | Business Law I | 3 | 0 | 3 |
| \# TR | 125 | Travel Industry Procedures | 4 | 0 | $\underline{4}$ |

## 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 math requirement elsewhere on this page.

## Health 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.


## SPRING SEMESTER

| BU | 150 | Supervision | 3 | 0 | 3 |
| ---: | :--- | :--- | :--- | :--- | :--- |
| \# TR | 280 | Senior Travel Seminar | 2 | 0 | 2 |
| \# TR | 290 | Travel Internship OR | 0 | 9 | 3 |
| HR | 260 | Hospitality Sales/Marketing | 3 | 0 | 3 |
| XX | xxx | General Education Elective | 3 | 0 | 3 |
| XX | xxx | Social Science Elective++ | 3 | 0 | 3 |
| XX | xxx | Travel Elective** | 3 | 0 | $\underline{3}$ |
|  |  |  |  | 17 |  |
|  |  | TOTAL CREDITS |  | $\mathbf{6 5 - 6 6}$ |  |

* Students who bave completed high school Algebra I with a grade of "C" or bigher are advised to take MT 120 Contemporary College Mathematics or bigher level math course. Students who have not completed high school Algebra I with a grade of "C" or higher should take MT 100. Note: the eight math courses, MT 103 through MT 115, do not meet graduation requirements for math. Students should contact their Department Head for appropriate course selection.
** Any course with a prefix of $A C, B U, H R, I S, T R$
*** BI 100, CH 100 and PH 100 do not meet this requirement
$+\quad$ FL 104 and FL 105 do not meet this requirement.
++ Any course with a prefix of AN, EO, HI, PS, PY or SO
\# 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 to both take classroom education and 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 INFORMATION SYSTEMS

## Computer Information Systems

The Computer Information Systems (CIS) Associate Degree provides extensive background for careers in the information technology field. Degree candidates begin with a common first year foundation, which includes course work in Windows, Office, DOS, Internet, Database, Programming, Unix/Linux and Networking fundamentals. In their second year all candidates take Network Operating Systems, Senior Project and request to concentrate in one of the following three areas:
Programming/Database • Networking • Internet Technologies
The degree of Associate in Science with a major in Computer Information Systems will be awarded upon successful completion of the program. Graduates secure positions such as computer programmers, network operators, LAN administrators, information specialists, database specialists, technical specialists, network technicians, and web site developers in an ever growing field. Graduates may also opt to continue their education in a Bachelor's Degree program elsewhere.

- The department maintains CISCO Local Network Academy status and offers all students a certified basic Cisco Networking course, Introduction to Networking. Students in the CISCO option, Networking, continue this training in their second year, taking two additional courses, Networking Theory and Networking Theory II. Students in this track have the opportunity to sit for CCNA, CISCO Certified Network Associate.


## 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.

| FALL SEMESTER | CL | LAB | CR |
| :---: | :---: | :---: | :---: |
| EN 101 English Composition | 4 | 0 | 4 |
| \# IS 101 Computer Information Systems | 2 | 2 | 3 |
| \# IS 121 Programming Fundamentals | 2 | 2 | 3 |
| \# IS 147 CIS Career Topics | 2 | 0 | 1 |
| MT 123 Intermediate Algebra | 4 | 0 | 4 |
| SO xxx Social Science Elective* | 3 | 0 | $\underline{3}$ |
|  |  |  | 18 |
| SPRING SEMESTER |  |  |  |
| EN 125 Communications and the Literature of Science and Technology OR |  |  |  |
| EN xxx English Elective | 3 | 0 | 3 |
| \# IS 228 Introduction to Networking | 2 | 2 | 3 |
| \# IS 267 Database Management Systems I | 2 | 2 | 3 |
| \# IS 291 Operating Systems | 2 | 2 | 3 |
| MT 125 Finite Mathematics | 4 | 0 | 4 |

## Specific Admission Requirements

1. Two years of pre-college mathematics (Algebra I and Algebra II OR Algebra I and Geometry) with grades of "C" or better;
2. Computer keyboarding skills are assumed.
\# Indicates major field courses.
Any course with a prefix of AN, EO, HI, PS, PY or SO

| DATABASE/PROGRAMMING OPTION |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| FALL SEMESTER | CL | LAB | CR |  |
| \# IS 200 Managing Information Systems | 2 | 2 | 3 |  |
| \# IS 240 Visual Basic | 2 | 2 | 3 |  |
| \# IS 247 Senior Project Preparation | 1 | 0 | 1 | 0 Y |
| \# IS 248 Networking Operating Systems | 2 | 2 | 3 | M S |
| IS xxx Information Systems Elective+ | 2 | 2 | 3 | P. T |
| XX xxx Science Elective** | 3-4 | 0 | 3-4 | E |
|  |  |  | 16-17 |  |
| SPRING SEMESTER |  |  |  |  |
| \# IS 268 Database Management Systems II | 2 | 2 | 3 |  |
| \# IS 298 Senior Project | 1 | 4 | 3 | F |
| \# IS xxx Information Systems Elective+ | 2 | 2 | 3 | 0. |
| XX xxx General Education Elective | 3-4 | 0 | 3-4 |  |
| XX xxx Humanities/Fine Arts/ |  |  |  |  |
| Foreign Language Elective | 3 | 0 | $\underline{3}$ |  |
|  |  |  | 15-16 |  |
| TOTAL CREDITS |  |  | 65-67 |  |

## NETWORKING OPTION

FALL SEMESTER

| \# IS | 200 | Managing Information Systems | 2 | 2 | 3 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| \# IS | 229 | Networking Theory | 2 | 2 | 3 |
| \# IS | 247 | Senior Project Preparation | 1 | 0 | 1 |
| \# IS | 248 | Network Operating Systems | 2 | 2 | 3 |
| IS | xxx | Information Systems Elective | 2 | 2 | 3 |
| XX | xxx | Science Elective** | $3-4$ | 0 | $\underline{3-4}$ |

SPRING SEMESTER
\# IS 231 Networking Theory II $\begin{array}{llll}2 & 2 & 3\end{array}$
\# IS 298 Data System Design Project $\quad 1 \begin{array}{lll} & 4 & 3\end{array}$
XX xxx General Education Elective 3-4 0 3-4
XX xxx General Elective 3-4 0 3-4
XX xxx Humanities/Fine Arts/ Foreign Language Elective 300

TOTAL CREDITS 65-68

## INTERNET TECHNOLOGIES OPTION

FALL SEMESTER

| \# IS | 200 | Managing Information Systems | 2 | 2 | 3 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| \# IS | 247 | Senior Project Preparation | 1 | 0 | 1 |
| \# IS | 248 | Network Operating Systems | 2 | 2 | 3 |
| \# IS | 286 | Web Design and Development | 2 | 2 | 3 |
| IS | xxx | Information Systems Elective | 2 | 2 | 3 |
| XX | xxx | Science Elective** | 3-4 | 0 | $\frac{3-4}{16-17}$ |
|  |  |  |  |  |  |
| SPRING SEMESTER |  |  |  |  |  |
| \# IS | 260 | Internet (Electronic) Commerce | 2 | 2 | 3 |
| \# IS | 287 | Web Design and Development II | 2 | 2 | 3 |
| \# IS | 298 | Data Systems Design Project | 1 | 4 | 3 |
| XX | xx | General Education Elective | 3-4 | 0 | 3-4 |
| XX | xxx | Humanities/Fine Arts/ |  |  |  |
|  |  | Foreign Language Elective | 3 | 0 | $\stackrel{3}{15-16}$ |
|  |  | TOTAL CREDITS |  |  | 65-67 |

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

+ Database/Programming students must take either IS 210 or IS 241 as one of their electives

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.

NHTI has transfer affiliations with four year institutions including:

- Keene State College

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

| FALL SEMESTER |  |  | CL | LAB | CR |
| :---: | :---: | :---: | :---: | :---: | :---: |
| \# EC | 102 | Foundations in Early |  |  |  |
|  |  | Childhood Education and Child Care* | 3 | 0 | 3 |
| \# EC | 120 | Growth and Development of the Young Child* | 3 | 0 | 3 |
| \# EC | 135 | Dynamics of Curriculum Development* | 4 | 0 | 4 |
| EN | 101 | English Composition** | 4 | 0 | 4 |
|  | 166 | PC Applications | 3 | 0 | $\underline{3}$ |

## SPRING SEMESTER

| \# EC | 185 | Health, Nutrition and Safety in |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  | Early Childhood Education* | 2 | 0 | 2 |
| \# EC | 140 | Sociology of Children and Families** | 3 | 0 | 3 |
| \# EC | 175 | Environments for Young Children** | 4 | 0 | 4 |
| EN | 120 | Communications | 3 | 0 | 3 |
| MT | 100 | Fundamental Mathematics |  |  |  |
|  |  | with Applications*** | 4 | 0 | 4 |
| PY | 105 | Introduction to Psychology | 3 | 0 | $\underline{3}$ |



* EC 102, 120, 135 and 185 are certificate courses.
** EC 140, 175, 293 and EN 101 are diploma courses.
*** Students who bave completed bigh school Algebra I with a grade of "C" or bigher are advised to take MT 120 Contemporary College Mathematics or bigher level math course. Students who have not completed high school Algebra I with a grade of " $C$ " or higher should take MT 100. Note: the eight math courses, MT 103 through MT 115, do not meet graduation requirements for math. Students should contact their Department Head for appropriate course selection.
**** BI 100, CH 100, and PH 100 do not meet this requirement.
\# Indicates major field courses.


## Specific Admission Requirements

1. Personal interview with Department Head and/or faculty; interviews are scheduled by the Admission Office once applications are received;
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.

Health, Character and Technical Standards, see page 27.

## 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 by the State when they receive their $\mathrm{BA} / \mathrm{BS}$ degree.

| FALL SEMESTER | CL | LAB | CR |
| :---: | :---: | :---: | :---: |
| \# ED 101 Introduction to Disabilities | 3 | 0 | 3 |
| \# ED 104 Foundations of Education | 3 | 0 | 3 |
| EN 101 English Composition | 4 | 0 | 4 |
| IS 166 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 205 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 belp 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!"


## Specific Admission Requirements

1. Algebra I with a grade of "C" or better;
2. Strong verbal and written English language skills are major considerations for acceptance;
3. Personal interview with Department Head and/or faculty member; interviews will be scheduled by the Admissions Office once applications are received;
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 27.

## 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 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 mini-


## 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

| \# ED | 201 | Legal Issues in Education | 3 | 0 | 3 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| \# ED | 203 | Teaching Strategies for Students with |  |  |  |
|  |  | Disabilities | 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 | $\underline{4}$ |

## 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 | $\underline{3}$ |  |
|  |  |  |  | 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 better;
2. Strong verbal and written English language skills are major considerations for acceptance;
3. Personal interview with Department Head and/or faculty member; interviews will be scheduled by the Admissions Office once applications are received;
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 27.

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 re－ sponsibilities．Furthermore，the student is expected to have the emo－ tional 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 24）

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．Prospec－ tive students with special needs requiring accommodations that may af－ fect 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 chil－ dren is of paramount concern to the De－ partment of Early Childhood Education． Applicants for positions in childcare，pre－ schools 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 diffi－ culty with the law，depending upon the nature of the problem，may not be em－ ployable or even eligible for practica．Ap－ plicants are advised that such matters will be discussed during the admissions inter－ view，so that future goals will not be com－ promised．

## Technical Standards

Technical Standards have been estab－ lished 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 De－ partment of Early Childhood Education will seriously consider all aca－ demically 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，col－ leagues，and parents；and sufficient writing skills to accurately record
children＇s daily progress and milestones as well as medications ad－ ministered，accident and suspected child abuse reports，etc．；
－Ability to work with frequent interruptions，to respond appropri－ ately 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 25 \＆ひ 26）

## 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 accommoda－ tions that may affect their learning are encouraged to contact the Disabili－ ties 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 teach ing 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 employ－ able or even eligible for field experience． Applicants are advised that such matters will be discussed during the admission in－ terview 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 success－ fully 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 con－ sideration to all academically qualified can－ didates providing that the technical stan－ dards can be met with reasonable accom－ modations．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，ado－ lescents，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 appropri－ ately 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.

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.)


\# 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.

## 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.

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).

|  |  |  |
| :--- | :--- | :--- |
| FALL | SEMESTER |  |
| \# BN | 101 | Introduction to Broadband Technology |
| \# BN | 109 | Computer Technology for ET |
| \# EL | 101 | Electric Circuits |
| EN | 101 | English Composition |
| MT | 133 | Elementary Functions |


| $\mathbf{C L}$ | LAB | CR |
| :--- | :--- | :--- |
| 3 | 0 | 3 |
| 2 | 2 | 3 |
| 3 | 3 | 4 |
| 4 | 0 | 4 |
| 5 | 0 | $\underline{5}$ |
|  |  | 19 |

## SPRING SEMESTER

\# BN 102 RF Signal Analysis $\begin{array}{llll}3 & 3 & 4\end{array}$
\# BN 110 Instrumentation Laboratory $\quad 1 \quad 4 \quad 3$
\# EL 110 Electronics I $\quad 3 \begin{array}{lll} & 3 & 4\end{array}$
$\begin{array}{llllll}\text { MT } & 134 & \text { Pre-Calculus } & 4 & 0 & 4\end{array}$
PH 133 Physics I $\begin{array}{llll}3 & 2 & \underline{4}\end{array}$
19


## 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 | 1 | 5 | 3 |  |
| XX | xxx | Humanities/Fine Arts/ |  |  |  |
|  | Foreign Language Elective | 3 | 0 | $\underline{3}$ |  |
|  |  |  |  | 14 |  |
|  |  | TOTAL CREDITS |  |  | $\mathbf{7 0}$ |

## Three Year Option

|  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| FALL SEMESTER |  |  |  |  |
| EN 101 | English Composition | CAB | CR |  |
| MT 133 | Elementary Functions | 4 | 0 | 4 |
| \# BN 101 | Introduction to Broadband Technology | 3 | 0 | $\underline{3}$ |
|  |  |  |  | 12 |
| SPRING SEMESTER |  |  |  |  |
| \# BN 110 | Instrumentation Laboratory | 1 | 4 | 3 |
| \# BN 109 | Computer Technology for ET | 2 | 2 | 3 |
| MT 134 | Pre-Calculus | 4 | 0 | 4 |
| PH 133 | Physics I | 3 | 2 | $\underline{4}$ |

## FALL SEMESTER

| XX xxx | Social Science Elective* | 3 | 0 | 3 |
| ---: | :--- | :--- | :--- | :--- |
| \# EL 101 | Electric Circuits | 3 | 3 | 4 |
| XX xxx | Humanities/Fine Arts/ |  |  |  |
|  | Foreign Language Elective | 3 | 0 | $\underline{3}$ |

## SPRING SEMESTER

\# EL 110 Electronics I $\quad 3 \quad 3 \quad 4$
EN 125 Communications and the Literature of Science and Technology 3003
\# MT 205 Calculus I 4
\# BN 102 RF Signal Analysis $\quad 3 \quad 3 \quad \underline{4}$

## FALL SEMESTER

\# EL 210 Electronics II $\quad 3 \quad 3 \quad 4$
\# BN 201 Fiber Optics and Transmission Lines $\begin{array}{llll} & 3 & 3 & 4\end{array}$
\# BN 206 Analog and Digital
Communication Systems $\quad 3 \quad 3 \quad \underline{4}$
SPRING SEMESTER
\# BN 240 Data and Internet Communications $\begin{array}{llll}3 & 3 & 4\end{array}$
\# BN 306 Senior Project 1
TOTAL CREDITS $\quad \frac{7}{70}$
\# Indicates Major field courses

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

Note: EL 102 can be substituted for BN 102; CP 107 is recommended for those
students planning to further their education.

## Specific Admission Requirements

1. Completion of high school Algebra I \& II with grades of "C" or better;
2. Basic skills in written English and reading comprehension are required;
3. High school Physics, Geometry and Chemistry are recommended.
[^2]
## 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.

Graduates secure positions as computer programmers in $\mathrm{C}++\mathrm{Ob}-$ ject 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 regional 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, where he is presently enrolled.
"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

| \# 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 | $\underline{5}$ |

## 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 | $\underline{4}$ |

## FALL SEMESTER

| \# CP | 235 | Algorithms with Object <br> Oriented Programming |
| ---: | :--- | :--- |
| \# CP | 260 | Computer Real Time Interfacing |
| \# CP | 301 | Computer Project Definition |
| MT | 205 | Calculus I |
| PH | 202 | Physics IIa (1st 7.5 weeks) |
| XX | xxx | Social Science Elective* |

## SPRING SEMESTER

| \# CP | 222 | Data Communications | 3 | 3 | 4 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| \# CP | 240 | Programming for Windows |  |  |  |
|  |  | Operating Systems |  |  |  |
| \# CP | 252 | Networking and Internet | 3 | 3 | 4 |
|  |  | Technologies | 3 | 3 | 4 |
| \# CP | 303 | Computer Project | 1 | 4 | 3 |
| XX | xxx | Humanities/Fine Arts/Foreign |  |  |  |
|  |  | Language Elective | 3 | 0 | $\underline{3}$ |
|  |  | TOTAL CREDITS |  |  | $\mathbf{7 4 - 7 5}$ |

The degree of Associate in Engineering Technology with a major in Computer Engineering Technology will be awarded upon successful completion of the program.

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.

## Computer Engineering Technology Three Year Option

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



| FALL SEMESTER |  |  |  |
| :---: | :---: | :---: | :---: |
| \# CP 235 Algorithms with Object |  |  |  |
| Oriented Programming | 3 | 3 | 4 |
| \# EL 101 Electric Circuits | 3 | 3 | 4 |
| MT 205 Calculus I | 4 | 0 | 4 |
| PH 202 Physics IIa (1st 7.5 weeks) | 3 | 2 | 2 |
|  |  |  | 14 |
| SPRING SEMESTER |  |  |  |
| \# CP 112 Machine and Assembly Language | 3 | 3 | 4 |
| \# CP 215 Integrated Circuits and Interfacing | 3 | 3 | 4 |
| \# CP 252 Networking and Internet Technologies | 3 | 3 | 4 |
| XX xxx Social Science Elective* | 3-4 | 0 | 3-4 |
|  |  |  | 15-16 |


| FALL SEMESTER |  |  |  |
| :---: | :---: | :---: | :---: |
| \# CP 260 Computer Real Time Interfacing | 3 | 3 | 4 |
| \# CP 301 Computer Project Definition | 1 | 0 | 1 |
| XX xxx Humanities/Fine Arts/Foreign Language Elective | 3 | 0 | $\frac{3}{8}$ |
| SPRING SEMESTER |  |  |  |
| \# CP 222 Data Communications | 3 | 3 | 4 |
| \# CP 240 Programming for Windows |  |  |  |
| Operating Systems | 3 | 2 | 4 |
| \# CP 303 Computer Project | 1 | 4 | $\underline{3}$ |
|  |  |  | 11 |
| TOTAL CREDITS |  |  |  |

## NHTI Faculty Profile



## George Flantinis

Department Head/Professor of Broadband Networking \& Communications Technology, Computer Engineering Technology, and Electronic Engineering Technology
B.Sc., Royal Hellenic

Naval Academy;
M.Sc., Royal Hellenic

Naval Academy;
B.S.E.E., U.S. Naval

Postgraduate School;
M.S.E.E., U.S. Naval

Postgraduate School; E.E., U.S. Naval Postgraduate School

Before joining the NHTI faculty in 1998, Professor Flantinis taught at the Polytechnic University of Athens in Greece and he also worked in one of the biggest computer integration companies in Greece.
"When I came to NHTI I was impressed by the connection that exists between students and faculty. I enjoy working with our students as they develop both personally and professionally during the time they spend in our programs of study."

The degree of Associate in Engineering Technology with a major in Computer Engineering Technology will be awarded upon successful completion of the program.

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.

## 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 $\mathrm{C}++$ 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.

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.)

| FALL SEMESTER | CL | LAB | CR |
| :---: | :---: | :---: | :---: |
| $\begin{array}{lll} \text { \# CP } & 107 & \begin{array}{l} \text { Introduction to Programming } \\ \text { with C++ } \end{array} \end{array}$ | 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 | CL | LAB | CR |
| \# 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 | $\underline{2}$ |
|  |  |  | 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: 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.

NH. Before joining InfoServe in 19 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 backeground 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.'

## 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


## Electronic Engineering Technology Three Year Option



## SPRING SEMESTER

| \# EL | 144 | Embedded Microsystems | 3 | 3 | 4 |
| ---: | :--- | :--- | :--- | :--- | :--- |
| MT | 134 | Pre-Calculus | 4 | 0 | 4 |
| PH | 133 | Physics I | 3 | 2 | $\underline{4}$ |
|  |  |  |  | 12 |  |




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.

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.


## NHTI Faculty Profile

Meurig T. Davies
Manufacturing Engineering
Technology
B.S. University of Wales, Cardiff
M.S. University of Birmingham

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 the Institute's Computer Integrated Manufacturing Laboratory, the equal of which can be found at very fenm universities. But I was even more impressed by the wonderful rapport which exists between students and faculty bere."

## FIRST YEAR



| SPRING SEMESTER |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :---: | :---: | :---: |
| EN | 120 | Communications OR |  |  |  |  |  |
| EN | 125 | Communications and the Literature |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
| of Science and Technology | 3 | 0 | 3 |  |  |  |  |
| IS | 166 | PC Applications | 3 | 0 |  |  |  |
| 3 |  |  |  |  |  |  |  |
| \# MC | 102 | Design Graphics II | 1 | 3 |  |  |  |
| \# MC | 150 | Statics and Strength of Materials | 3 | 2 |  |  |  |
| MT | 134 | Pre-Calculus | 4 | 0 |  |  |  |
| PH | 135 | Physics II | 2 | 2 |  |  |  |


| 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 250 | Statistical Process Control | 2 | 2 | 3 |
| XX xxx | Elective** | 1-3 | 0-3 | 1-4 |
| XX xxx | Humanities/Fine Arts/ | 3 |  |  |
|  |  |  |  | 15-19 |
|  | TOTAL CREDITS |  |  | 72-77 |

## SUGGESTED ELECTIVES:

| MC | 205 | Material Science | 3 | 2 | 4 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| MT | 206 | Calculus II | 4 | 0 | 4 |

\# Indicates major field courses.

* Any course with a prefix of AN, EO, HI, PS, PY or SO.
** Subject to the approval of the Department Head


## 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.
[^3]
## Manufacturing Engineering Technology <br> Three Year Option

| FALL SEMESTER |  | CL | LAB | CR |
| :---: | :---: | :---: | :---: | :---: |
| EN 101 | English Composition |  | 0 | 4 |
| \# MF 111 | Manufacturing and Materials |  |  |  |
|  | Processing | 3 | 2 | 4 |
| MT 133 | Elementary Functions | 5 | 0 | 5 |
|  |  |  |  | 13 |


| SPRING SEMESTER |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| EN | 120 | Communications OR |  |  |  |
| EN | 125 | Communications and the Literature |  |  |  |
|  |  | of Science and Technology |  |  |  |
| IS | 166 | PC Applications | 3 | 0 | 3 |
| MT | 134 | Pre-Calculus | 3 | 0 | 3 |
| XX | xxx | Social Science Elective* | 4 | 0 | 4 |
|  |  | $3-4$ | 0 | $\underline{3-4}$ |  |



## SPRING SEMESTER

| \# MC | 102 | Design Graphics II | 1 | 3 | 2 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| \# MC | 150 | Statics and Strength of Materials | 3 | 2 | 4 |
| \# MF | 250 | Statistical Process Control | 2 | 2 | 3 |
| PH | 135 | Physics II | 2 | 2 | $\underline{3}$ |


| 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 |  |

## SUGGESTED ELECTIVES:

$\begin{array}{llllll}\text { MC } & 205 & \text { Material Science } & 3 & 2 & 4\end{array}$
MT 206 Calculus II $\quad 4 \begin{array}{lll}4\end{array}$
\# Indicates major field courses.

* Any course with a prefix of AN, EO, HI, PS, PY or SO.
** Subject to the approval of the Department Head


## 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.

## SPRING SEMESTER

| \# MF 230 | Production Systems | 3 | 2 | 4 |
| ---: | :--- | :--- | :--- | :--- |
| \# MF 241 | Computer Integrated Manufacturing |  |  |  |
|  | (CIM) | 3 | 3 | 4 |
| XX | xxx | Elective** | $1-3$ | $0-3$ |
|  |  |  | $\frac{1-4}{-12}$ |  |
|  | TOTAL CREDITS |  |  | $9-12-77$ |

## 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.

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.)

| 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 | $\frac{4}{19}$ |
| SPRING SEMESTER |  |  |  |  |  |
| EN | 120 | Communications OR |  |  |  |
| EN | 125 | Communications and the Literature of Science and Technology | 3 | 0 | 3 |
| IS | 166 | 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 | $\underline{3}$ |



Sustainable Energy Ventures Project

| 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 226 | Thermodynamics and Heat Transfer | 3 | 0 | 3 |
| \# MC 260 | Mechanical Design II | 3 | 2 | 4 |
| XX xxx | Humanities/Fine Arts/ |  |  |  |
|  | Foreign Language Elective | $3-4$ | 0 | $3-4$ |
| XX xxx | Elective** | $1-3$ | $0-3$ | $\underline{1-4}$ |
|  | TOTAL CREDITS |  |  |  |
|  |  |  | $\mathbf{7 2 - 1 9}$ |  |
|  |  |  |  |  |

SUGGESTED ELECTIVES:

| MC | 103 | Design Graphics III | 1 | 3 |
| :--- | :--- | :--- | :--- | :--- |
| 2 |  |  |  |  |
| MC | 282 | Senior Project | 2 | 2 |
| MT | 206 | Calculus II | 4 | 0 |

\# Indicates major field courses.

* Any course with a prefix of AN, EO, HI, PS, PY or SO.
** Subject to the approval of the Department Head


## 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.
[^4]
## Mechanical Engineering Technology Three Year Option



|  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | ---: |
| FALL | SEMESTER |  |  |  |  |
| \# MC | 101 | Design Graphics I | 1 | 3 | 2 |
| MT | 205 | Calculus I | 4 | 0 | 4 |
| PH | 133 | Physics I | 3 | 2 | 4 |
| XX | xxx | Humanities/Fine Arts/ |  |  |  |
|  |  | Foreign Language Elective | $3-4$ | 0 | $\underline{3-4}$ |
|  |  |  |  | $13-14$ |  |

## SPRING SEMESTER

| \# MC | 102 | Design Graphics II | 1 | 3 | 2 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| \# MC | 150 | Statics and Strength of Materials | 3 | 2 | 4 |
| \# MC | 226 | Thermodynamics and Heat Transfer | 3 | 0 | 3 |
| PH | 135 | Physics II | 2 | 2 | $\underline{3}$ |
|  |  |  |  | 12 |  |




NHTI Alumni Profile

Nicole Smith
Class of 1998

Major: Mechanical and
Manufacturing
Engineering Technology
"NHTI has given me the chance to explore new aspects of my career choice with a lot of hands-on experience and great professors. I was encouraged to use my knowledge to work on different problems and come up with innovative solutions. It was a lot of hard work, but the education I gained was well worth it."

## SUGGESTED ELECTIVES:

| MC | 103 | Design Graphics III | 1 | 3 | 2 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| MC | 282 | Senior Project | 2 | 2 | 3 |
| MT | 206 | Calculus II | 4 | 0 | 4 |

## 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.

## SPRING SEMESTER

| \# MC | 205 | Material Science | 3 | 2 | 4 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| \# MC | 260 | Mechanical Design II | 3 | 2 | 4 |
| XX | xxx | Elective** | $1-3$ | $0-3$ | $\underline{1-4}$ |
|  |  |  |  | $9-12$ |  |
|  | TOTAL CREDITS |  |  | $\mathbf{7 2 - 7 7}$ |  |

[^5]
## HEALTH PROGRAMS

## Dental Assisting

The 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.

FALL SEMESTER

| \# DN 110 | Dental Assisting Science I |
| ---: | :--- | :--- |
| \# DN 105 | Dental Radiology for Dental Assisting |
| \# DN 161 | Dental Materials - Dental Assisting |
| \# DN 175 | Dental Assisting Theory I |
| \# DN 191 | Dental Assisting Clinical Experience I |
| EN 100 | Introductory English OR |
| EN 101 | English Composition |
| PY 105 | Introduction to Psychology |

## 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 <br> with Computer Applications |  |  |  |
| \# DN 196 | 1 | 0 | 1 |  |
| Dental Assisting |  |  |  |  |
| \# DN 239 | Clinical Experience II |  |  |  |
|  | Medical Emergencies for <br> Dental Assisting | 0 | 15 | 5 |
| \# DN 275 | Dental Assisting Theory II | 2 | 0 | 2 |
| EN 101 | English Composition OR | 1 | 2 | 2 |
| EN 120 | Communications | $3-4$ | 0 | $\underline{3-4}$ |
|  |  |  |  | $17-18$ |

## SUMMER SEMESTER

\# DN 298 Dental Assisting Clinical Experience III (6 weeks) $2 \begin{array}{lll}2 & 8 & 4\end{array}$
EN 120 Communications*

TOTAL CREDITS

| CL LAB | CR |  |
| :--- | :--- | :---: |
| 3 | 0 | 3 |
| 2 | 3 | 3 |
| 2 | 3 | 3 |
| 2 | 0 | 2 |
| 0 | 4 | 1 |
| 4 | 0 | 4 |
| 3 | 0 | $\underline{3}$ |
|  |  | 19 |
| 2 | 0 | 2 |
| 2 | 0 | 2 |
| 1 | 0 | 1 |
| 0 | 15 | 5 |
| 2 | 0 | 2 |
| 1 | 2 | 2 |
| $3-4$ | 0 | $\underline{3-4}$ |

Dental auxiliaries 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 IS 166, are available through the college.

[^6]
## Specific Admission Requirements

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 en-
rollment;
4. Be in good physical and mental health in order to qualify for the program.

Health, Character and Technical Standards, see page 49.

## Use of Computers in the Dental Auxiliaries Programs



## NHTI Alumni Profile

Emily Griffin
Class of 1998
Major: Dental Assisting
Emily returned to college as a nontraditional student in 1996, graduating from NHTI in 1998.
"Going backe to school at age 42 proved to be a wonderful experience for me. The people at NHTI were so belpful. 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.' obs 4-7 40-44

## 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 bigh scbool level prereqnisite 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 \& Physiology courses and Microbiology. It is bighly recommended that applicants complete as many of the General Education courses (non-dental bygiene 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.

NHTI has transfer affiliations with four year institutions including:

- New England College

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

| FALL SEMESTER |  |  | CL | LAB | CR |
| :---: | :---: | :---: | :---: | :---: | :---: |
| BI | 101 | 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 | 0 | 9 | 3 |
| \# DN | 134 | Oral Anatomy I | 2 | 1 | 2 |
| EN | 101 | English Composition | 4 | 0 | 4 |

## SPRING SEMESTER

| BI | 102 | Anatomy and Physiology II | 3 | 2 | 4 |
| :---: | :--- | :--- | :--- | :--- | :--- |
| \# DN | 103 | Dental Hygiene II | 2 | 0 | 2 |
| \# DN | 114 | Clinical Dental Hygiene II | 0 | 9 | 3 |
| \# DN | 136 | Oral Anatomy II | 2 | 0 | 2 |
| \# DN | 140 | Dental Radiology for Dental Hygiene | 2 | 3 | 3 |
| PY | 105 | Introduction to Psychology | 3 | 0 | $\underline{3}$ |

## SUMMER SEMESTER

BI 202 Microbiology $\begin{array}{lll}3 & 3 & 4\end{array}$
\# DN 162 Dental Materials for Dental Hygiene $\begin{array}{llll}2 & 3 & 3\end{array}$
\# DN 201 Dental Hygiene III $1 \begin{array}{lll}2 & \underline{2}\end{array}$

## 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 241 Community Dental Health | 3 | 0 | 3 |
| \# DN 240 Dental Hygiene Science | 4 | 0 | 4 |
| MT 129 Math for Allied Health** OR |  |  |  |
| MT xxx Math Elective | 3 | 0 | 3 |
|  |  |  | 16-17 |
| SPRING SEMESTER |  |  |  |
| EN 120 Communications | 3 | 0 | 3 |
| \# DN 221 Clinical Dental Hygiene IV | 1 | 12 | 4 |
| \# DN 225 Dental Hygiene Specialty Clinic* | 0 | 4 | 1 |
| \# DN 227 Dental Ethics and Jurisprudence | 1 | 0 | 1 |
| SO 105 Introduction to Sociology | 3 | 0 | 3 |
| XX xxx Humanities/Fine Arts/ |  |  |  |
| Foreign Language Elective | 3 | 0 | 3 |
|  |  |  | 14-15 |
| TOTAL CREDITS |  |  | 76 |

\# Indicates major field courses

* Dental Hygiene Specialty Clinic will be offered in both the fall and spring semesters, second year; department faculty will assign students to one semester or the other.
** Students may elect to takee a bigher level math course; MT 100-MT 115 do not meet this requirement.


## Health, Character and Technical Standards, see page 49.

## Specific Admission Requirements

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 12month period; (Information regarding test registration is available from the Admissions Office.);
2. College preparatory level courses in biology and chemistry (with labs) as well as two years of college preparatory math (Algebra I and Algebra II or Algebra I and Geometry) must be completed with minimum grades of "C";
3. An informational group interview with the Dental Admissions Committee;
4. 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;
5. Submit a complete physical examination and immunization record before program registration. This form may be obtained from the Health Services Office;
6. 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 Dental Auxiliaries Programs

Dental auxiliaries 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 IS 166 , are available through the college.

[^7]
## 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 bigh school prerequisite courses and grades, college courses and grades (only those courses required in the Radiologic Technology Program, an observation essay and a personal interview. It is bighly recommended that applicants complete as many of the General Education courses (non-Radiology 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 program start.

The Radiologic Technology program offers an advanced placement option for current or former registered Radiographers in need of retraining. Applicants must apply for admission to the program and meet with the department head to customize a course of study suited to the individual. This option is available on a space available basis.

## 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.

## Specific Admission Requirements

1. High school level courses in biology and chemistry (with labs) and Algebra I (Algebra II recommended) must be completed with minimum grades of "C";
2. Personal interview will be arranged with the applicant by the Admission Office once the admission file is complete;
3. Clinical observation period prior to admission into the Program (includes submission of documentation from the site(s) and a written statement of your experience); specific guidelines and requirements for observation will be mailed to candidates upon receipt of admission application and verification of applicant's qualifications;
4. 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.

| SUMMER SEMESTER (8 weeks) | CL | LAB | CR |
| :---: | :---: | :---: | :---: |
| MT 120 Contemporary College Math | 4 | 0 | 4 |
| \# XR 101 Fundamentals of Radiography | 1 | 2 | 2 |
| \# XR 116 Image Production and Evaluation I | 2 | 2 | 3 |
| \# XR 151 Radiologic Nursing Procedures | 2 | 0 | $\underline{2}$ |
|  |  |  | 11 |
| FALL SEMESTER |  |  |  |
| BI 101 Anatomy and Physiology I | 3 | 2 | 4 |
| EN 101 English Composition | 4 | 0 | 4 |
| \# XR 161 Radiographic Positioning and |  |  |  |
| Clinical Procedures I | 3 | 18 | 7 |
| \# XR 220 Image Production and Evaluation II | 2 | 2 | $\underline{3}$ |
|  |  |  | 18 |
| SPRING SEMESTER |  |  |  |
| BI 102 Anatomy and Physiology II | 3 | 2 | 4 |
| EN 120 Communications | 3 | 0 | 3 |
| \# XR $164 \begin{aligned} & \text { Radiographic Positioning and } \\ & \text { Clinical Procedures II }\end{aligned}$ | 3 | 18 | 7 |
| \# XR $180 \begin{aligned} & \text { Radiographic Equipment Operation } \\ & \text { and Maintenance }\end{aligned}$ | 3 | 0 | $\underline{3}$ |


| SUMMER SEMESTER (11 weeks) | CL | LAB | CR |
| :---: | :---: | :---: | :---: |
| PY 105 Introduction to Psychology | 3 | 0 | 3 |
| \# XR 201 Pathology for |  |  |  |
| Radiologic Technologists | 3 | 0 | 3 |
| \# XR 202 Introduction to CT Scanning | 3 | 0 | 3 |
| \# XR 165 Radiographic Clinical Procedures III | 0 | 24 | 4 |
|  |  |  | 13 |
| FALL SEMESTER |  |  |  |
| IS 166 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 | $\underline{6}$ |
|  |  |  | 9 |
| TOTAL CREDITS |  |  | 81 |

\# Indicates major field courses.
Health, Character and Technical Standards, see page 49.


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 allied health related degrees in a patient care area. See page 69 for certificate curriculum. Radiation Therapists work in hospitals, private radiation oncology centers and research centers.

| FALL SEMESTER | CL LAB |  | CR |
| :---: | :---: | :---: | :---: |
| \# RTH 101 Introduction to Radiation Therapy 3 |  | 0 | 3 |
|  |  |  |  |
| Radiation Therapy I | 3 | 2 | 4 |
| BI 101 Anatomy and Physiology I | 3 | 2 | 4 |
| EN 101 English Composition | 4 | 0 | 4 |
| SPRING SEMESTER |  |  |  |
| \# RTH 115 Patient Care | 2 | 0 | 2 |
| XR 180 Radiographic Equipment |  |  |  |
| Operation and Maintenance | 3 | 0 | 3 |
| BI 102 Anatomy and Physiology II | 3 | 2 | 4 |
| MT xxx Math Elective | 3-4 | 0 | 3-4 |
| \# RTH 190 Clinical Practice I | 0 | 16 | $\underline{3}$ |
|  |  |  | 5-16 |
| SUMMER SEMESTER |  |  |  |
| \# RTH 150 Medical Imaging and Processing | 3 | 0 | 3 |
| PI 242 Contemporary Ethical Issues | 3 | 0 | 3 |
| EN 120 Communications | 3 | 0 | 3 |
| RTH 195 Clinical Practice II | 0 | 16 | $\underline{3}$ |
|  |  |  | 12 |


| FALL SEMESTER |  |  |  |
| :---: | :---: | :---: | :---: |
| \# RTH 200 Radiation Protection and Biology | 3 | 0 | 3 |
| \# RTH 205 Treatment Planning | 3 | 0 | 3 |
| PY 105 Psychology | 3 | 0 | 3 |
| \# RTH 290 Clinical Practice III | 0 | 24 | 4 |
| SPRING SEMESTER |  |  |  |
| \# RTH 210 Principles and Practice of Radiation Therapy II | 3 | 2 | 4 |
| \# RTH 215 Sectional Anatomy and Pathology | 3 | 0 | 3 |
| \# RTH 220 Radiation Therapy Physics | 3 | 0 | 3 |
| SO 105 Sociology | 3 | 0 | 3 |
| \# RTH 293 Clinical Practice IV | 0 | 24 | 4 |
| SUMMER SEMESTER |  |  |  |
| IS 166 PC Applications | 3 | 0 | 3 |
| \# RTH 280 Registry Review | 1 | 0 | 1 |
| \# RTH 295 Clinical Practice V | 0 | 32 | $\underline{6}$ |
|  |  |  | 10 |
| TOTAL CREDITS |  |  | 83 |

## Specific Admission Requirements:

1. High school level courses in Algebra I (Algebra II recommended), Biology with lab and Chemistry with lab, all with grades of "C" or higher;
2. High school level physics is recommended;
3. Clinical observation period in a Radiation Oncology Center; criteria established by and available from program faculty; call 603-271-7159 for information;
4. Completion of Cardiopulmonary Resuscitation and Airway Obstruction Management for one and two person adult, infant and child before program registration;
5. 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 49.

## 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.

| 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 |

H SUMMER SEMESTER ( 10 weeks)
E \# DS 241 Principles of Vascular Ultrasound $\quad \begin{array}{llll}3 & 2 & 4\end{array}$

FALL SEMESTER
\# DS 233 Seminars in Sonography $\quad 4 \begin{array}{lll}4 & 0 & 4\end{array}$
\# DS 298 DMS Clinic IV $\begin{array}{llll} & 32 & \underline{8}\end{array}$
TOTAL CREDITS 53
\# Indicates major field courses.


NHTI Faculty Profile
Sandra Beliveau 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 bealthcare environment bave 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

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 better;
4. A high school level course in Algebra I is required;
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:


## 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
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 Postsecondary 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 bear that many students are initially intimidated by required science courses. We make it a point to belp our chemistry and biology students overcome these concerns, so they can have more opportunities for success."


## Nursing (Associate Degree)

The Associate Degree Registered Nurse Program is designed to prepare men and women for careers as registered nurses. The program is open to high school graduates, adult learners, and licensed practical nurses seeking career advancement who meet admission requirements. Nursing and general education courses are offered to provide a sound learning foundation for the practice of nursing. In 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 1-800-669-9656. ext.153). Graduates of the Nursing Program are prepared to administer high quality technical nursing care to individuals of all ages and in a variety of health care settings. Graduates receive an Associate in Science degree with a major in Nursing and are eligible to apply for the National Council Licensure Examination for Registered Nurses (NCLEX$\mathrm{RN}^{\circledR}$ Examination).

Three program options exist at the Associate Degree level: (1) Day Associate Degree Option; (2) Evening Associate Degree Option; and (3) LPN-ADN Upward Mobility Option.

All nursing courses must be completed within four years of the date of entry into the first nursing course. 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.
NHTI has transfer affiliations with four-year institutions including:

- Endicott College - Plymouth State College
- Rivier College - University of New England
- University of New Hampshire

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

## Day Associate Degree Option

| FALL SEMESTER | CL | LAB | CR |
| :---: | :---: | :---: | :---: |
| BI 101 Anatomy and Physiology I | 3 | 2 | 4 |
| EN 101 English Composition | 4 | 0 | 4 |
| \# NU 115 Nursing I | 5 | 10 | 8 |
| Introduction to Psychology | 3 | 0 | $\underline{3}$ |
|  |  |  | 19 |
| SPRING SEMESTER |  |  |  |
| BI 102 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 | $\underline{3}$ |

SECOND YEAR

## 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 | $\underline{11}$ |  |
|  |  |  |  | $18-19$ |  |
| SPRING SEMESTER | 3 | 0 | 3 |  |  |
| EN | xxx | English Elective | 3 | 0 | 3 |
| IS | 166 | PC Applications | 4 | 15 | 9 |
| \# NU | 215 | Nursing III | 3 | 0 | $\underline{3}$ |
| PI | 242 | Contemporary Ethical Issues |  |  | 18 |
|  |  |  |  |  |  |
|  | TOTAL CREDITS |  |  | $73-74$ |  |

## Evening Associate Degree Option

The Evening Associate Degree Nursing Option is an alternative for students who prefer to take courses in the evening. The program is identical to the Day Option but offers courses over a three year period.

| FALL SEMESTER | CL | LAB | CR |
| :---: | :---: | :---: | :---: |
| BI 101 Anatomy and Physiology I | 3 | 2 | 4 |
| EN 101 English Composition | 4 | 0 | $\underline{4}$ |
|  |  |  | 8 |
| SPRING SEMESTER |  |  |  |
| BI 102 Anatomy and Physiology II | 3 | 2 | 4 |
| PY 105 Introduction to Psychology | 3 | 0 | $\underline{3}$ |
|  |  |  | 7 |
| SUMMER SEMESTER |  |  |  |
| BI 202 Microbiology | 3 | 3 | 4 |
| EN xxx English Elective | 3 | 0 | $\underline{3}$ |
|  |  |  | 7 |

FALL SEMESTER
\# NU 115 Nursing I $\quad 5 \quad 10 \quad 8$
PY 220 Human Growth and Development: The Life Span
$30 \quad 3$
11
SPRING SEMESTER
\# NU 116 Nursing IIA $\quad 6 \quad 1511$
MT xxx Math Elective* $3-4 \quad 0 \quad \underline{3-4}$
14-15
FALL SEMESTER
\# NU 117 Nursing IIB $\quad 6 \quad 15 \quad 11$
PI 242 Contemporary Ethical Issues $\quad 3 \quad 0 \quad \underline{3}$
SPRING SEMESTER
\# NU 215 Nursing III $\quad 4 \begin{array}{lll}15 & 9\end{array}$
IS 166 PC Applications $\quad 3 \quad 0 \quad \underline{3}$
TOTAL CREDITS 73-74
\# Indicates major field courses.

* Any course with a prefix of MT except MT 100-115; students will be advised regarding appropriate course selection.
CL - Classroom
$L A B$ - Simulation laboratory, laboratory or clinical
CR - Credits
Please see Nursing Program Comments on page 45. Health, Cbaracter and Technical Standards, page 49.


## Specific Admission Requirements

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;
3. Minimum "composite all" score of 50 on the National League for Nursing Pre-Admission Examination-RN (NLN); applicants are permitted to take the NLN exam only once in any 12 month period. Information regarding registration for the test may be obtained from the Admissions Office (603) 271-7134 or 1-800-247-0179;
4. Submit, on NHTI nursing reference forms, two references from professionals, supervisors or teachers.

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.

## 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. The course of study may be completed in two years. 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.

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

|  |  |  |
| :--- | :--- | :--- |
| FALL SEMESTER |  |  |
| BI | 101 | Anatomy \& Physiology I |
| EN | 101 | English Composition |
| \# NU | 177 | Upward Mobility Nursing |
| PY | 105 | Introduction to Psychology |

## SPRING SEMESTER

\(\left.\begin{array}{ccllll}BI \& 102 \& Anatomy \& Physiology II \& 3 \& 2 \& 4 <br>
\# NU \& 116 \& Nursing IIA OR \& \& \& <br>
\# NU \& 117 \& Nursing IIB \& 6 \& 15 \& 11 <br>
PY \& 220 \& \& \begin{array}{l}Human Growth and Development: <br>
<br>

\end{array} \& The Life Span \& 3\end{array}\right) 0\)| $\underline{3}$ |
| :--- |

## 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 | $\underline{11}$ |

## SPRING SEMESTER

| EN | xxx | English Elective | 3 | 0 | 3 |
| :--- | :--- | :--- | :--- | :--- | :---: |
| IS | 166 | PC Applications | 3 | 0 | 3 |
| \# NU | 215 | Nursing III | 4 | 15 | 9 |
| PI | 242 | Contemporary Ethical Issues | 3 | 0 | $\underline{3}$ |
|  |  |  |  |  | 18 |
|  |  | TOTAL CREDITS |  |  | $\mathbf{7 3 - 7 4}$ |

## Specific Admission Requirements

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;
3. Hold a current LPN license and submit a copy with admission application;
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.

RN and Upward Mobility Nursing Program Comments:

1. Applicants are strongly encouraged to attend a group information session; please call the Admissions Office (603-271-7134) for details. Candidates are encouraged to apply early since the program fills up quickly. Completed applications are reviewed on a rolling basis.
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 the following: current medical insurance; current professional liability insurance (arranged by the College and automatically charged to the student's account); a complete physical examination; current immunizations; current CPR certification for one and two person adult, infant and child;
3. Clinical facilities are located within a radius of 60 miles of NHTI. Depending on clinical site availability, students may be required to attend an alternative clinical rotation, evenings or days;
4. The lecture portion of the day and evening nursing courses are combined and offered in the mid-late afternoon;
5. All students enrolled in a clinical nursing course will be charged a $\$ 350 /$ semester Nursing Clinical Surcharge.
\# Indicates major field courses

* Any course with a prefix of MT except MT 100-115; students will be advised regarding appropriate course selection.
Health, Character and Technical Standards, see page 49.



## NHTI Faculty Profile

Pamela Kallmerten
Nursing
Diploma in Nursing, The Christ Hospital School of Nursing BSN, Colby-Sawyer College MSN, Northeastern University

Pam came to NHTI in 1997 initially as adjunct faculty and then full time in the fall of 1999. She brings 17 years of nursing experience including many years of nursing education. Currently, she maintains certification and licensure as an Advanced Registered Nurse Practitioner.
"I started my nursing education as a young woman the year of my bigh school graduation. Continuing my education at the baccalaureate and graduate levels while starting a family and continuing employment in nursing was at times challenging. I can appreciate the many roles that our nursing students try to maintain in addition to that of student. We at NHTI can belp the adult learner as well as the young person to achieve their personal goals to enter nursing."

[^8]
## Practical Nursing Program

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. See page 45.

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.

## FIRST YEAR

| SPRING SEMESTER | CL | LAB | CR |
| :---: | :---: | :---: | :---: |
| BI 107 Integrated Biological Science+* | 3 | 0 | 3 |
| EN 101 English Composition | 4 | 0 | 4 |
| GS 102 Study Strategies | 2 | 0 | 2 |
| \# PN 101 Practical Nursing I | 3 | 15 | 8 |
| SUMMER SEMESTER |  |  |  |
| BI 107 Integrated Biological Science+* | 2 | 0 | 2 |
| \# PN 102 Practical Nursing II | 3 | 15 | 8 |
| PY 105 Introduction to Psychology | 3 | 0 | 3 |
| FALL SEMESTER |  |  |  |
| \# PN 103 Practical Nursing III | 4 | 15 | 9 |
| PY 220 Human Growth \& Development | 3 | 0 | 3 |
| TOTAL CREDITS |  |  | 42 |

+ 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.


## Practical Nursing Program Comments

1. Prior to the start of the clinical nursing courses, students are required to have on file in the Health Services Office (603-2717153) documentation of the following: current medical insurance; current professional liability insurance (arranged by the College and automatically charged to the student's account); a complete physical examination; current immunizations; current CPR certification for one and two person adult, infant and child;
2. Clinical facilities are located within a radius of 60 of NHTI. Depending on clinical site availability, students may be required to do an alternative clinical rotation (day or evening).
3. All students enrolled in a nursing course will be charged $\$ 350$ / semester Nursing Clinical Surcharge.

## Practical Nursing

## Specific Admission Requirements

1. Completion of high school credits in math, English, and biology with a lab, all with grades of " C " or higher;
2. Assessment tests in math, reading comprehension and writing; tests help Admissions Committee determine student's readiness for the PN Program;
3. Attend an Admission interview to discuss academic plan; Admissions Office will call students to schedule;
4. Submit two letters of reference on forms provided by the college.

In addition:

- Applicants must be in good physical and mental health in order to qualify for PN licensure. 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 PN licensure.


## Paramedic Emergency Medicine

New Hampshire Technical Institute's Associate in Science with a major in Paramedic Emergency Medicine combines a flexible 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.

NHTI has transfer affiliations with four year institutions including:

- College for Lifelong Learning
- George Washington University
- Rivier College
- University of Maryland/Baltimore

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

|  |  |  |  |
| :--- | :--- | :--- | :--- |
| FALL | SEMESTER |  |  |
| BI | 101 | Anatomy \& Physiology I |  |
| EN | 101 | English Composition |  |
| MT | 129 | Math for Allied Health |  |
| \# PM | 117 | Physical Assessment |  |
| \# PM | 135 | Medical Emergencies |  |
| \# PM | 142 | Cardiology I |  |
| \# PM | 161 | Integration Lab I |  |


| CL | LAB | CR |
| :---: | :--- | :--- |
| 3 | 2 | 4 |
| 4 | 0 | 4 |
| 3 | 0 | 3 |
| 2 | 0 | 2 |
| 2 | 0 | 2 |
| 2 | 0 | 2 |
| 0 | 3 | $\frac{1}{1}$ |
|  |  | 18 |

## SPRING SEMESTER

| BI | 102 | Anatomy \& Physiology II | 3 | 2 | 4 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| \# PM | 111 | Paramedic Procedures | 1 | 3 | 2 |
| \# PM | 125 | Pharmacology | 3 | 0 | 3 |
| \# PM | 150 | Advanced Trauma | 3 | 0 | 3 |
| \# PM | 162 | Integration Lab II | 0 | 3 | 1 |
| \# PM | 244 | Advanced Cardiology | 2 | 0 | $\underline{2}$ |

## SUMMER SEMESTER

\# PM 190 Introduction to Clinical Environment 1 \# PM 194 Hospital Clinic $\quad 0 \quad 18 \quad \underline{5}$


## 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."


Health, Character and Technical Standards, on page 49.

## Specific Admission Requirements

1. High school level courses in Biology and Chemistry (with labs) completed with grades of " C " or better;
2. Algebra I completed with a grade of "C" or better;
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 $\underline{25}$ 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 Emergency Medical Technician to Paramedic Emergency Medicine Option located on 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.

## EMT to Paramedic Emergency Medicine Option

The EMT to Paramedic Emergency Medicine Option offers individuals 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. This option starts with the summer EMT Basic course leading to certification through the National Registry of EMTs. Following that, current EMTs will gain valuable and required field experience offered through the Basic Life Support (BLS) Field Internship rotations. 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.

## - FIRST YEAR

SUMMER SEMESTER
\# EMT 100 Emergency Medical Technician Basic

## CL LAB CR <br> $\begin{array}{ll}0 & 7\end{array}$

FALL SEMESTER

| BI | 101 | Anatomy and Physiology | 3 | 2 | 4 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| \# EMT | 101 | Basic Life Support Field Clinic | 0 | 9 | 3 |
| \# EMT | 104 | Topics in EMT Basic Practice | 2 | 0 | 2 |
| EN | 101 | English Composition | 4 | 0 | 4 |
| MT | 129 | Math for Allied Health | 3 | 0 | 3 |

## SPRING SEMESTER

| \# EMT | 102 | Basic Life Support Field Clinic | 0 | 2 | 4 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| \# EMT | 105 | Advanced EMT Basic Practice | 0 | 9 | 3 |
| HS | 101 | Medical Terminology | 2 | 0 | 2 |
| IS | 166 | PC Applications | 3 | 0 | 3 |

SECOND YEAR
FALL SEMESTER
\# EMT 103 Basic Life Support Field Clinic Section C (Optional)

## START PARAMEDIC TRACK

## 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;
3. Students who have not completed one or more of the courses in items \#1 and \#2 will be advised by the Admissions Office and department faculty regarding admissibility to the EMT track;
4. Each EMT student will be individually evaluated during the summer course to determine non-major field course placement;
5. Admission requirements for the Paramedic program can be found on page 47.
[^9]
## 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 38)

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 39)

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 40 \& 41)

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

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

In addition, the student must have:

- 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;
- Sufficient hearing to assess patient needs;
- 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
- 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)

(see Program pages 44 \& 45)
Applicants must be in good physical and mental health in order to qualify for RN 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 licensure.

## Paramedic Emergency Medicine (sse Prograum page 47) <br> Technical/Physical Standards

The student in the Paramedic Emergency Medicine Program 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 Human Service program provides professional Addiction Counseling education and field experience for students who seek careers as human service workers with a specialty in substance abuse counseling. The first year of study covers a broad range of courses in both human service and alcohol and drug abuse. In the second year, students specialize in addiction counseling and receive extensive clinical training.

Graduates of the program serve in positions in public and private general psychiatric hospitals, youth and group homes, alcohol, drug, and addictions treatment centers, mental health and social services agencies and employee assistance programs.

A dual admission program is available with College for Lifelong Learning for those students interested in continuing their education.

With permission of the Department Head and assuming adequate resources are available, practica may be taken in semesters other than those indicated in the program outline below.

## FIRST YEAR

## FALL SEMESTER

\# AD 120 Survey of Addictive Behaviors and Treatment
EN 101 English Composition
\# HU 111 Introduction to Human Service
\# MH 185 Interviewing: Processes and Techniques
PY 105 Introduction to Psychology

## SPRING SEMESTER

\# AD 205 Fundamentals of Dependency Counseling Skills
BI 120 Human Biology
BI 121 Human Biology Lab (optional)
IS 166 PC Applications*
PY 220 Human Growth and Development:
\# PY 283 Group Counseling

## Specific Academic Requirements

1. Candidates are strongly encouraged to attend one of the Human Service Department informational sessions or a personal interview with a department faculty; please contact the Admissions Office for scheduling at 603-271-7134 or 1-800-247-0179 or nhtiadm@nhctc.edu;
2. Please refer to math requirement elsewhere on this page.

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 53.




# NHTI Faculty Profile 

Kathleen Rossetti Curran Human Service
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 belp 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 in need of direct, personal support and assistance. 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.

Each of the three practica courses provides students with 150 contact hours of practica experience for a total of 450 hours in the field. Students are involved in the selection of the site in which to fulfill the desired practica requirements. The practicum enables students to apply what they have been learning to practical, hands-on situations.

The degree of Associate in Science with a major in Human Service is awarded upon successful completion of the two-year 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 and nursing homes, hospitals and school systems.

NHTI has transfer affiliations with four year institutions including:

- College for Lifelong Learning (dual admission program)
- Keene State College
- New England College
- Plymouth State College
- Rivier College
- UNH-Durham

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

With permission of the Department Head and assuming adequate resources are available, practica may be taken in semesters other than those indicated in the program outline below.

| FALL SEMESTER | CL | LAB | CR |
| :---: | :---: | :---: | :---: |
| EN 101 English Composition | 4 | 0 | 4 |
| \# HU 103 Introduction to Practicum Experience | 1 | 0 | 1 |
| \# HU 111 Introduction to Human Service | 3 | 0 | 3 |
| \# HU 220 Family Systems, Current Social Issues and Health Care Delivery Modalities in Human Service | 2 | 0 | 2 |
| \# MH 185 Interviewing: Processes and Techniques |  | 0 | 3 |
| PY 105 Introduction to Psychology | 3 | 0 | $\frac{\underline{3}}{16}$ |
| SPRING SEMESTER |  |  |  |
| BI 120 Human Biology | 3 | 0 | 3 |
| BI 121 Human Biology Lab (optional) | 0 | 2 | 1 |
| \# HU 193 Human Service Practicum I | 2 | 10 | 5 |
| PY 220 Human Growth and Development: The Life Span | 3 | 0 | 3 |
| \# PY 283 Group Counseling | 3 | 0 | $\frac{\underline{3}}{4-15}$ |

## Specific Admission Requirements

1. Candidates are strongly encouraged to attend one of the Human Service Department informational sessions or a personal interview with a department faculty; please contact the Admissions Office for scheduling at 603-271-7134 or 1-800-247-0179 or nhtiadm@nhctc.edu;
2. Please refer to math requirement elsewhere on this page.



## 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 296 | Human Service Practicum III | 2 | 10 | 5 |  |
| MT 100 | Fundamental Mathematics |  |  |  |  |
|  | with Applications** | 4 | 0 | $\underline{4}$ |  |

## TOTAL CREDITS

\# Indicates major field courses

* Any course with a prefix of AN, EO, HI, PS, PY or SO
** Students who bave completed bigh school Algebra I with a grade of "C" or bigher are advised to take MT 120 Contemporary College Mathematics or bigher level math course. Students who have not completed bigh school Algebra I with a grade of " $C$ " or higher should take MT 100. Note: the eight math courses, MT 103 through MT 115, do not meet graduation requirements for math. Students should contact their Department Head for 18 appropriate course selection.


## Health, Character and Technical Standards, see page 53.

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.

[^10]
## Mental Health

The Human Service - Mental Health program provides education and field experience for mental health workers. The first year of study covers a broad range of courses in the human service field. In the second year, students develop their knowledge of the specific field of mental health.

Graduates serve in positions as mental health workers, field representatives, case managers, outreach workers, activity and recreational directors, and special needs classroom assistants in various state, local and private health agencies, group homes, adolescent and elderly facilities, and in school and child care settings.

A dual admission program is available with College for Lifelong Learning for those students interested in continuing their education.

With permission of the Department Head and assuming adequate resources are available, practica may be taken in semesters other than those indicated in the program outline below.

| FALL SEM | ESTER | CL | LAB | CR |
| :---: | :---: | :---: | :---: | :---: |
| EN 101 | English Composition | 4 | 0 | 4 |
| \# HU 103 | Introduction to Practicum Experience | 1 | 0 | 1 |
| \# HU 111 | Introduction to Human Service | 3 | 0 | 3 |
| \# HU 220 | Family Systems, Current Social Issues and Alternative Health Care Delivery Modalities in Human Service | 2 | 0 | 2 |
| \# MH 185 | Interviewing: |  |  |  |
|  | Processes and Techniques | 3 | 0 | 3 |
| PY 105 | Introduction to Psychology | 3 | 0 | $\underline{3}$ |

## SPRING SEMESTER



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 53.




## SPRING SEMESTER

| \# AD 235 | Physiology and Pharmacology <br> of Addiction | 3 | 0 | 3 |
| :--- | :--- | :--- | :--- | :--- |
| EN xxx | English Elective | 3 | 0 | 3 |
| \# HU 242 | Ethics and the Professional Helper | 3 | 0 | 3 |
| \# MH 296 | Mental Health Practicum III | 2 | 10 | 5 |
| MT 100 | Fundamental Mathematics |  |  |  |
|  | with Applications** | 4 | 0 | $\underline{4}$ |
|  |  |  |  | 18 |
|  | TOTAL CREDITS |  | $\mathbf{6 5 - 6 6}$ |  |

\# Indicates major field courses

* Any course with a prefix of AN, EO, HI, PS, PY or SO
** Students who bave completed high school Algebra I with a grade of " $C$ " or bigher are advised to take MT 120 Contemporary College Mathematics or bigher level math course. Students who have not completed high school Algebra I with a grade of "C" or bigher should take MT 100. Note: the eight math courses, MT 103 through MT 115, do not meet graduation requirements for math. Students should contact their Department Head for appropriate course selection.


# Health, Technical and Character Standards 

Addiction Counseling, Human Service, Mental Health (see Program pages 50, 51 and 52)

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, Mental Health 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 Institute 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 Institute Liability Insurance, starting in each academic year. The students will be billed directly. Students are also eligible to purchase Health Insurance through the Institute 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:

- College for Lifelong Learning (dual admission program)
- Franklin Pierce College
- NH Police Standards and Training
- Plymouth State College
- 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

| \# CJ | 101 | Introduction to the Criminal |
| :---: | :---: | :--- | :--- |
|  |  | Justice System |
| \# CJ | 121 | Criminal Procedure |
| EN | 101 | English Composition |
| IS | 166 | PC Applications |
| PY | 105 | Introduction to Psychology |

## CL LAB CR

| 3 | 0 | 3 |
| :--- | :--- | :--- |
| 4 | 0 | 4 |
| 4 | 0 | 4 |
| 3 | 0 | 3 |
| 3 | 0 | $\underline{3}$ |

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 | $\underline{3}$ |

## Specific Admission Requirements

1. Please refer to math requirement elsewhere on this page.

| 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 |  |  |  |
| \# CJ | 275 | Senior Project | 0 | 9 | 3 |
| MT | 100 | Fundamental Mathematics with Applications** | 4 | 0 | 4 |
| PY | 205 | Crisis Intervention | 3 |  | $\stackrel{3}{16-19}$ |
| SPRING SEMESTER |  |  |  |  |  |
| BI | 120 | Human Biology | 3 | 0 | 3 |
| BI | 121 | Human Biology Lab*** (optional; highly recommended) | 0 | 2 | 1 |
| \# 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 |
|  |  |  |  |  | 15-19 |
|  |  | TOTAL CREDITS |  |  | 64-68 |

\# Indicates major field courses.

* May be taken either Fall or Spring semester of senior year.
** Students who bave completed high school Algebra I with a grade of "C" or bigher are advised to take MT 120 Contemporary College Mathematics or bigher level math courss. Students who have not completed bigh school Algebra I with a grade of " $C$ " or higher should take MT 100. Note: the eight math courses, MT 103 through MT 115, do not meet graduation requirements for math. Students should contact their Department Head for appropriate course selection.
*** Students considering further education are strongly encouraged to take the BI 121 Human Biology Lab to ensure the transferability of the BI 120 class.


## Health 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.

## Paralegal Studies

The Associate Degree in Paralegal Studies, like the Certificate Program, 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 Amercian 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. However, most major course subjects are offered in the evenings at this time. The general education courses are offered both in the evenings and days.

## FIRST YEAR

FALL SEMESTER
EN
E
IS
101 English Composition $\quad$ PC Applications

## SPRING SEMESTER

AC 101 Accounting I
EN 120 Communications OR
EN xxx English Elective
MT 123 Intermediate Algebra
\# PL 110 Litigation and Trial Preparation
\# PL 221 Real Estate

| CL | LAB | CR |
| :--- | :--- | :--- |
| 4 | 0 | 4 |
| 3 | 0 | 3 |
| 3 | 0 | 3 |
| 3 | 0 | 3 |
| 3 | 0 | $\underline{3}$ |
|  |  | 16 |




## NHTI Student Profile

## Linda Wakefield

Major: Paralegal Studies
A graduate of Kingswood Regional High School and a resident of Concord, Linda is a single mother seeking to develop the skills that will help her enjoy a career in the legal profession. She also served as president of the NHTI chapter of the Phi Theta Kappa academic honor society, while working in a Concord law firm as a paralegal intern.
"NHTI has provided me with a quality education with its caring, professional teachers - a combination I feel can best be found in a community-based college."

## Specific Admission Requirements

1. One year of college preparatory mathematics (Algebra I) with a grade of "C" or better;
2. Interview with department head; interviews will be scheduled by the Admissions Office 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).

## Health 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.

[^11]
## 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.

## Specific Admission Requirements

1. One year of college preparatory mathematics (Algebra I) with a grade of "C" or better.

## Liberal Arts and Sciences Option

General Requirements<br>EN 101 English Composition Credits<br>EN xxx English Elective [excluding EN 100 and EN 120]<br>Computer Literacy<br>4<br>3<br>(IS 166 or equivalent)<br>GS 100 General Studies Seminar 1<br>Humanities<br>9<br>(XX xxx Humanities/Fine Arts/<br>Foreign Language Elective)<br>Mathematics<br>8-9<br>MT 123 Intermediate Algebra OR<br>higher level math course AND MT xxx<br>Science (with lab)<br>8<br>[excluding BI 100, CH 100, and PH 100]<br>Social Sciences $\underline{9}$<br>(three courses with AN, EO, HI, PS, PY, or SO prefix, excluding HI 104 and HI 105)<br>$\underline{\text { Arts and Science Electives }}$<br>Courses selected from Humanities<br>(Literature, Western Civilization, Fine Arts,<br>Foreign Languages, Philosophy),<br>Mathematics, Sciences, Social Sciences, and English<br>General Electives<br>6<br>Courses to meet individual interests and goals<br>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<br>Credits<br>EN 101 English Composition 4<br>EN 1xx English Elective 3<br>[excluding EN 100 and EN 120]<br>Computer Literacy<br>3<br>(IS 166 or equivalent)<br>GS 100 General Studies Seminar<br>1<br>Humanities<br>9

HI 104 Western Civilization I AND
HI 105 Western Civilization II AND
XX xxx Humanities/Fine Arts/
Foreign Language Elective
Mathematics
8-9
MT 123 Intermediate Algebra OR
higher level math course AND MT xxx
Science (with lab)
8
[excluding BI 100, CH 100, and PH 100]
Social Sciences
$\underline{2}$
(three courses with AN, EO, HI, PS, PY, or SO prefix, excluding HI 104 and HI 105)

## 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
Minimum of 64 credits required for Graduation
Note: a minimum of 16 credits bours 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
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 belp 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
General Studies/Mathematics
B.S., University of Wales/Swansey P.G.C.E., University of Birmingham 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 RequirementsCredits
EN 101 English Composition ..... 4
EN xxx English Elective ..... 3[excluding EN 100 and EN 120$]$
Computer Literacy ..... 3(IS 166 or equivalent)
GS 100 General Studies SeminarHumanities9
(XX xxx Humanities/Fine Arts/
Foreign Language Electives)
Mathematics4
MT 123 Intermediate Algebra ORhigher level math course
Social Sciences ..... $\underline{9}$
(three courses with AN, EO, HI, PS, PY, or SO prefix, excluding HI 104 and HI 105) ..... 33
Concentration
MT 251 Statistics4
BI 111 \& BI 112 General Biology I \& II ..... 8
CH 103 \& CH 104 General Chemistry I \& II ..... 8
Three of the following:
BI 101 Anatomy \& Physiology I ..... 4
BI 102 Anatomy \& Physiology II ..... 4
BI 202 Microbiology ..... 4
BI 159 and BI 160 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 ..... 3-411-12
General ElectivesCourses to meet individual goals3

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 |
| IS 166 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 | $\underline{3}$ |
|  | 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 bours must be earned through instruction atNHTI 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.

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 <br> (two courses with AN, EO HI, PS, PY, or SO prefix, excluding HI 104 and HI 105) | 6 |
| C. | Mathematics <br> (MT 100 or higher, excluding MT 103 - MT 115) | 3-4 |
| D. | Science <br> (one science course with or without a lab) [excluding BI 100, CH 100, and PH 100] | 3-4 |
| E. | Humanities <br> (EN xxx [excluding EN 100 and EN 120] and XX xxx Humanities/Fine Arts/ Foreign Language Elective) | $\underline{6}$ |
|  | TOTAL | - 22-24 |

## Other Required Courses

(for both options)
A. Computer Literacy (IS 166 or equivalent) 3

## 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 <br> (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
\($$
\begin{array}{llll}\text { *B. } & \text { Experiential Credit } & \text { maximum } & 20 \\
\text { *C. } \begin{array}{l}\text { Certificate in a specific program area } \\
\text { (must relate to experiential credit) }\end{array} & \\
& \text { And/Or } & \\
\text { *D. Coursework in a specific subject area } \\
& \begin{array}{c}\text { (must relate to experiential credit) }\end{array}
$$ \& \begin{array}{c}minimum <br>

TOTAL\end{array} \&\)| $\mathbf{1 5}$ |
| :--- |
| $\mathbf{3 6}$ | <br>

\& TOTAL CREDITS \& $\mathbf{6 4 - 6 6}\end{array}$

* If the combination of experiential credit and certificate program courses totals less than 35 credits, additional courseworke 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. Students who have completed high school Algebra I with a grade of "C" or higher are advised to take MT 120 Contemporary College Mathematics or higher level math course. Students who have not completed high school Algebra I with a grade of "C" or higher should take MT 100. Note: the eight math courses, MT 103 through MT 115, do not meet graduation requirements for math. Students should contact their Department Head for appropriate course selection. 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
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
Parkland Medical Center, Derry, NH
Portsmouth Regional Hospital, Portsmouth, NH
Southern Maine Medical Center, Biddeford, ME
Wentworth Douglass Hospital, Dover, NH
York Hospital, York, ME

## PARAMEDIC EMERGENCY MEDICINE FIELD INTERNSHIP SITES

Greater Lowell EMS, Lowell, MA
Lawrence General Hospital ALS, Lawrence, MA
New Britain Emergency Medical Services, New Britain, CT
Trinity EMS, Inc., Haverhill, MA

## PARAMEDIC EMERGENCY MEDICINE HOSPITAL CLINIC SITES

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


## NHTI Faculty/

Alumni Profile

Shirley Rennie
Class of 1976

Major: Nursing
Currently: NHTI Student Health Services Nurse Practitioner

After graduating from NHTI, Shirley developed an extensive background in pediatrics, working at large regional hospitals in NH and Massachusetts. She later earned a Master's Degree while developing a Wellness Program for Lockheed Martin Corporation before returning to NHTI as Nurse Practitioner.
"I received the foundation of my nursing education at NHTI. It was an important stepping stone to the role of advanced practice nurse. I'm excited about my dual role as nurse practitioner in Student Health Services and as a member of the nursing faculty bere."

## RADIOGRAPHY HOSPITAL CLINIC SITES

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

## NURSING PRACTICUM SITES

Catholic Medical Center, Manchester, NH Concord Hospital, Concord, NH
Elliot Hospital, Manchester, NH
Havenwood-Heritage Heights, Concord, NH
Lakes Region General Hospital, Laconia, NH
New Hampshire Hospital, Concord, 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 Hospital, Concord, NH
Cricket Meadows Infant/Toddler Center, New London, NH
Dame School, Concord, NH
Dewey School, Concord, NH
Early Enrichment Center, Concord, NH
Eastman School, Concord, NH
Franklin Head Start, Franklin, NH
Harold Martin School, Hopkinton, NH
Kimball Elementary School, Concord, NH
Montessori Learning Center, Pembroke, NH
New Durham Elementary School, New Durham, NH
Parkside Children's Center, Concord, NH
Plymouth Elementary School, Plymouth, NH
Ralph Waldo Emerson Preschool, Concord, NH
Rumford School, Concord, NH
St. Paul's School Children's Learning Center, Concord, NH
Serendipity School, Franklin, NH
Stepping Stones Kindergarten, New London, 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
Windy Hill Child Care, Colby-Sawyer College, New London, 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
Division of Alcohol and Drug Abuse Prevention and Recovery
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 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 Division of Children Youth and Families
NH Fish and Game Department
NH Prison for Women
NH Public Defender's Office
NH State Department of Probation and Parole Juvenile Services, NH
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 | North Hampton |
| :--- | :--- |
| Concord | Northfield |
| Deerfield | Nottingham |
| Derry | Ossipee |
| Dover | Pembroke |
| Epping | Plaistow |
| Exeter | Plymouth |
| Franklin | Portsmouth |
| Fremont | Raymond |
| Gilford | Rochester |
| Goffstown | Salem |
| Gorham | Sanbornton |
| Grantham | Sandown |
| Hanover | Somersworth |
| Hampton | Sutton |
| Henniker | Swanzey |
| Hillsboro | Tilton |
| Hollis | Thornton |
| Hooksett | Washington |
| Hopkinton | Weare |
| Hudson | Windham |
| Laconia | Woodstock |

New Hampshire Sheriff's Departments
$\begin{array}{ll}\text { Carroll County } & \text { Grafton County } \\ \text { Hillsborough County } & \text { Merrimack County }\end{array}$

| 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 enclosed application, located in the back of this brochure, together with a $\$ 10.00$ non-refundable application fee, to the Admissions Office. 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 bigh 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 basics accounting certificate, student swill 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 603-2716965. This program is available days and evenings. This program is "financial aid eligible."

| AC | 101 | Accounting I | 3 |
| :--- | :--- | :--- | :--- |
| AC | 102 | Accounting II | 3 |
| BU | 101 | Introduction to Business | 3 |
| BU | 225 | Business Law | 3 |
| IS | 166 | PC Applications | 3 |
| IS | 265 | Spreadsheets | $\underline{3}$ |
|  |  | TOTAL PROGRAM CREDITS | $\mathbf{1 8}$ |

## 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 | $\underline{4}$ |
|  |  | TOTAL PROGRAM CREDITS | $\mathbf{2 2}$ |

Prerequisite: Applicants must submit proof of high school level Algebra I (or the NHTI equivalent) with a grade of "C" or better.

## Entrepreneurship/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 David Coeyman at 603-271-8880. This program is available evenings only. This program is not "financial aid eligible."

|  |  |  | Credits |
| :--- | :--- | :--- | :--- |
| BU | 101 | Introduction to Business | 3 |
| BU | 170 | Principles of Marketing | 3 |
| BU | 220 | Entrepreneurship | 3 |
| BU | 240 | Small Business Management | $\underline{3}$ |

Choose one elective:
AC 101 Accounting I 3
BU 150 Supervision 3
BU 174 Principles of Sales 3
BU 262 Consumer Behavior $\underline{3}$

TOTAL PROGRAM CREDITS 15

## 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. Cantor at 603-271-6963. This program is available days and evenings. This program is "financial aid eligible."

|  |  |  | Credits |
| :--- | :--- | :--- | :--- |
| GY | 135 | Destination Geography I | 3 |
| GY | 136 | Destination Geography II | 3 |
| IS | 166 | PC Applications | 3 |
| IS | 260 | Internet Commerce | 3 |
| IS | 286 | Web Design and Development | 3 |
| TR | 101 | The Tourism System | 3 |
| TR | 210 | E-Travel | $\underline{3}$ |
|  |  | TOTAL PROGRAM CREDITS | $\mathbf{2 1}$ |

## 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. Cantor at 603-271-6963. This program is available days and evenings. This program is "financial aid eligible."

## Credits

| BU | 225 |
| :--- | :--- |
| HR | 227 |
| HR | 229 |
| HR | 245 |
| HR | 260 |
| TR | 101 |
| TR | 211 |
| HR | 269 |

## 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. Cantor at 603-271-6963. This program is available evenings only. This program is "financial aid eligible."

HR 115
HR 227
HR 229
Front Office Operations Legal Issues for Hotel Industry

HR 245
HR 260
HR 269
Meeting/Convention Planning 3
Hospitality/Sales Marketing 3
Food \& Beverage Management $\underline{3}$

## Credits

3
3
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 David Coeyman 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 245 | Organizational Behavior | 3 |
| BU 273 | Human Resource Management | 4 |
| BU 275 | Labor-Management Relations | 3 |
|  |  | 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 |

## 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 David Coeyman at 603-2718880. 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 | $\frac{4}{16}$ |
| Choose one elective: |  |  |
| BU 245 | Organizational Behavior | 3 |
| BU 273 | Human Resource Management | 4 |
| BU 275 | Labor-Management Relations | $\underline{3}$ |
|  |  | 3-4 |

## 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 David Coeyman 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 | 170 | Principles of Marketing | 3 |
| BU | 174 | Sales | 3 |
| BU | 261 | Advertising | $\underline{3}$ |
|  |  |  | $\mathbf{1 5}$ |

## Choose one elective: <br> BU 262 Consumer Behavior 3

BU 265 Marketing Research 4
BU 280 Marketing Seminar $\underline{3}$

TOTAL PROGRAM CREDITS 18-19

## Travel and Tourism

The Travel and Tourism certificate is a travel counselor/airline agentfocused 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. Cantor at 603-271-6963. This program is available days and evenings. This program is "financial aid eligible."

| GY | 135 | Destination Travel Geography I | 3 |
| :--- | :--- | :--- | :--- |
| GY | 137 | Destination Travel Geography II | 3 |
| TR | 101 | The Tourism System | 3 |
| TR | 125 | Travel Industry Procedures | 4 |
| TR | 225 | Airline Reservation | 3 |
| XX | xxx | Travel or Hotel Elective | $\underline{3}$ |
|  |  | TOTAL PROGRAM CREDITS | $\mathbf{1 9}$ |

## Computers

## Computer Information Systems

The Computer Information Systems 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 Richard VanPelt, 603-271-2369. This program is available days and evenings. This program is "financial aid eligible."

| Required Courses: |  |  | Credits |
| :---: | :---: | :---: | :---: |
| IS | 101 | Computer Information Systems | 3 |
| IS | 121 | Programming Fundamentals | 3 |
| IS | 267 | Database Management Systems I | 3 |
|  |  |  | 9 |

AND one (1) of the following:
IS 228 Introduction to Networking 3
IS 240 Visual Basic 3

IS 248 Networking Operating Systems $\underline{3}$ 3

AND any two of the following:

| IS | 200 | Managing Information Systems | 3 |
| :--- | :--- | :--- | :--- |
| IS | 228 | Introduction to Networking | 3 |
| IS | 229 | Networking Theory | 3 |
| IS | 231 | Networking Theory II | 3 |
| IS | 240 | Visual Basic | 3 |
| IS | 241 | Advanced Visual Basic | 3 |
| IS | 248 | Network Operating Systems | 3 |
| IS | 268 | Database Management Systems II | 3 |
| IS | 286 | Web Design and Development | 3 |
| IS | 287 | Web Design and Development II | 3 |
| IS | 291 | Operating Systems | $\underline{3}$ |

Other IS or CP course requiring approval
of Department Head

TOTAL PROGRAM CREDITS
21-22

## Education Programs <br> Career and Technical Education Alternative Certification (pending approval)

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 (course pending approval).

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 College. 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 Asso ciate or Baccalaureate Degree completion;
- those with some college courses or an Associate Degree and significant work/life experience who would like to earn a cre dential 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. This program is "financial aid eligible."

| ED | 101 | Introduction to Disabilities | 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 |  |
|  |  | (pending approval) | 3 |
| EN | 101 | College Composition | 4 |
| PY | 109 | Educational Psychology | 3 |
| PY | 220 | Human Growth and Development | $\underline{3}$ |
|  |  |  | TOTAL PROGRAM CREDITS |

## 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 12 credits toward the Associate Degree. For more information contact Susan Rowe Morison at 603-271-2305. This program is available days and evenings. This program is not "financial aid eligible."

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 cbildhood education. Contact Susan Rowe Morison at the number above for further information.

Fall Semester

## Credits

EC 102 Foundations in Early Childhood Education/Child Care 3
EC 120 Growth and Development of the Young Child

Spring Semester

| EC | 135 | Dynamics of Curriculum <br> Development | 4 |
| :--- | :--- | :--- | :--- |
| EC | 185 | Health, Nutrition \& Safety in Early <br> Childhood Education | $\underline{2}$ |

TOTAL PROGRAM CREDITS

## 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 603-271-4143 or Ellen Dokton at 603-271-8881. Courses in this program are scheduled in the late after-noon-early evening, beginning at 4:00 pm. This program is "financial aid eligible."

| Fall Semester | Cr |  |
| :--- | :--- | :--- |
| ED | 101 | Introduction to Disabilities |
| ED | 104 | Foundations of Education |
| ED | 105 | The Teaching-Learning Process |
| MT | 251 | Statistics |
|  |  | 3 |
|  |  | 3 |
| Spring | Semester | $\underline{4}$ |
| ED | 201 | Legal Issues in Education |
| ED | 204 | Instructional Technology |
| ED | 212 | Design of Instruction |
| PY | 109 | Educational Psychology |
|  |  |  |
|  |  | 3 |
| To Be Arranged |  |  |
| ED | 220 | Field Experience in Education |

## Credits

ED 101 Introduction to Disabilities 3
ED 104 Foundations of Education 3
ED 105 The Teaching-Learning Process 3
MT 251 Statistics 4

Spring Semester

## 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 Ellen Dokton at 603-271-8881 for additional information. This program is "financial aid eligible."

## Fall Semester

| ED 101 | Introduction to Disabilities |
| :--- | :--- |
| ED 200 | Supporting Students with <br> Challenging Behaviors |
| ED 203 | Teaching Strategies for Students <br> with Disabilities |

## Spring Semester

ED 204 Instructional Technology 3
EN 101 English Composition $\underline{4}$
7

## TOTAL PROGRAM CREDITS

## Engineering Technology Programs

## Broadband Networking \&

## Communications Technology

This Certificate Program will provide state-of-the-art capability in broadband communications, offering telecommunications skills and indepth understanding of broadband technologies dealing with fiber optics, coaxial cable, microwave, antennas and satellite communication systems as well as an in-depth understanding of required performancemonitoring 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 George Flantinis at 603-271-7754 or e-mail at gflantinis@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 <br> Communication Systems | 4 |
| BN 240 | Data and Internet Communication <br> TOTAL PROGRAM CREDITS | $\mathbf{4}$ |
|  | TO4 |  |

## Computer Aided Design

This 22 credit-hour certificate program is designed for those just entering the field of architecture, civil engineering and design visualization, as well as the practicing professionals who desire to enhance their skills by learning to use CAD. The main focus of this certificate is to offer individual students in-depth, hands-on experience into the software and the relationship between the design, engineering and CAD. 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 2-D as well as 3-D drawings in CAD, model and visualize 3-D objects for project presentations. For additional 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
$\begin{array}{ll}\text { AR } 190 & \begin{array}{l}\text { Architectural, Engineering } \\ \\ \\ \\ \text { Graphics \& Materials }\end{array}\end{array}$
CAD101 AutoCAD 2D 3
CAD102 AutoCAD 3D 3
IS 166 PC Applications $\quad \underline{3}$ 13
SELECT ONE OF THE THREE AREAS OF EMPHASIS: Architectural Design

| AR | 191 | Architectural Desktop |
| :--- | :--- | :--- |
| AR | 192 | Revit |
| AR | 193 | 3D Studio Viz |

Land Development
CV 191 Land Development Desktop 3

CV 192 Civil Design 3
CV 193 Survey CAD $\underline{3}$
Design Visualization
DV 191 3D Studio Max 1
DV 192 3D Studio max 2 (Advanced Modeling,
Visualization \& Animation) 3
DV 193 Introduction to Photoshop $\frac{3}{9}$

TOTAL PROGRAM CREDITS
22


## 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 BN 109 Computer Technology for ET 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 George Flantinis at 603-271-7754 or e-mail at gflantinis@nhctc.edu. This program is available days and evenings. This program is "financial aid eligible."

## Required initial course:

## Credits

CP $235 \quad \begin{aligned} & \text { Algorithms With Object } \\ & \text { Oriented Programming }\end{aligned}$
4
4

| AND any three of the following |
| :--- |
| (check prerequisites in course descriptions):   <br> CP 240 Programming for Windows <br> Operating Systems <br> CP 222  <br> Internetworking <br> CP 252 Networking and Internet Technologies |
| CP 260 Computer Real Time Interfacing |

## TOTAL PROGRAM CREDITS



## 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 (BN 109) which will be offered on a regular basis at NHTI. For more information contact George Flantinis at 603-2717754 or e-mail at gflantinis@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 | $\mathbf{4}$ |
|  |  | TOTAL PROGRAM CREDITS | $\mathbf{2 0}$ |


| Prerequisites: |  |
| :--- | :--- | :--- |
| MT 133 | Elementary Functions |
| (or equivalent backeground) |  |
| BN 109 | Computer Technology for ET <br> OR 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 |
| LD | 115 | Landscape Architecture Design Theory |
|  | $\underline{3}$ |  |
|  |  | 3 |

Spring Semester
LD $102 \quad$ Plant Materials II 3
LD 112 Landscape Architectural Drafting and Sketching
$\underline{3}$
6

## SECOND YEAR

Fall Semester

| LD | 109 | Landscape Surveying |
| :--- | :--- | :--- |
| LD | 120 | Planting Design |

Spring Semester

| LD 117 | Small Scale Design Project | 3 |
| :--- | :--- | :--- |
| LD 112 | Landscape Construction |  |
|  | Details and Methods | $\underline{3}$ |
|  |  | $\mathbf{6}$ |

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) with final grades of "C" or better.

## 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 transform 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 or Dottie Poudrier, CCS, Program Coordinators, 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 | 3 |
| BI | 121 | Human Biology Lab (optional) | $\underline{1}$ |
|  |  |  | $\mathbf{6 - 7}$ |

## Spring Semester

| BI | 122 | Basic Pathophysiology |  |
| :--- | :--- | :--- | :--- |
| HS | 104 | Health Care Data Content <br> and Delivery Systems | 3 |

## Summer Semester

IS 166 PC Applications $\underline{3}$ 3

## SECOND YEAR

## Fall Semester*

HS 112 Basic ICD-9-CM (lab) 2
HS 113 Intermediate ICD-9-CM $\underline{4}$

Spring Semester**
HS $114 \quad$ Basic Ambulatory Coding 2
HS 115 Intermediate Ambulatory Care $\frac{4}{6}$

TOTAL PROGRAM CREDITS 27-28

* HS 112 will meet twice a week for five weeks, followed by HS 113 for ten weekes.
** 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 an 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 |
| :--- | :--- | :--- |
| IS | 166 | PC Applications |
| HS | 101 | Medical Terminology |

## Spring Semester

| BI 120/121 | Human Biology with Lab | 4 |
| :--- | :--- | :--- |
| HS 104 | Health Care Data Content |  |
|  | \& Delivery System | $\underline{3}$ |

## SECOND YEAR

Fall Semester
EN 101 English Composition 4
MN 101 Medical Transcription with Lab* $\frac{3}{7}$

Spring Semester
BI 122 Basic Pathophysiology 3
MN 202 Advanced Medical Transcription $\quad \underline{3}$

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 two-year allied health programs that are patient care related. This program is "financial aid eligible."

An Associate Degree option is available for students who have not completed a two-year allied health program. See page 41.

| 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 205 Treatment Planning | 3 | 0 | 3 |
| RTH 290 Clinical Practice III | 0 | 24 | $\frac{4}{17}$ |
| Spring Semester |  |  |  |
| RTH 210 Principles and Practice of Radiation Therapy II | 3 | 2 | 4 |
| RTH 215 Sectional Anatomy and Pathology | 3 | 0 | 3 |
| RTH 220 Radiation Therapy Physics | 3 | 0 | 3 |
| RTH 293 Clinical Practice IV | 0 | 24 | 4 |
|  |  |  | 14 |
| Summer Semester |  |  |  |
| RTH 280 Registry Review | 1 | 0 | 1 |
| RTH 295 Clinical Practice V | 0 | 32 | $\underline{6}$ |
|  |  |  | 7 |
| TOTAL PROGRAM CREDITS |  |  | 38 |

## Fall Semester

RTH 101 Introduction to Radiation Therapy Radiation Therapy I
RTH 200 Radiation Protection and Biology
RH 205 Treatment Planning

Spring Semester
RTH 210 Principles and Practice of Radiation Therapy II
RTH 215 Sectional Anatomy and Pathology
RTH 293 Clinical Practice IV

Summer Semester
RTH 280 Registry Review

TOTAL PROGRAM CREDITS

## 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 185 Interviewing: Process and Techniques
$\underline{3}$

Spring Semester

| CJ | 150 | Criminology | 3 |
| :--- | :--- | :--- | :--- |
| CJ | 215 | Correction Operations | 3 |
| AD | 115 | Fundamentals of Criminal |  |
|  |  | Justice-Oriented Addiction Treatment | $\underline{3}$ |
|  |  |  | $\mathbf{9}$ |

## Summer Semester

AD 215 Internship: Orientation to Addictive Behaviors Counseling with Criminal Justice Clients

TOTAL PROGRAM CREDITS
24

## Community Social Service

The Certificate program in Community Social Service is an eightcourse, 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."

| CS | 111 | Introduction to Community <br>  <br>  <br> Social Services | Credits |
| :--- | :--- | :--- | :--- |
| 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 <br> Development: The Life Span | $\mathbf{3}$ |
|  |  |  | $\underline{21}$ |

Choose one elective:

| AD | 120 | Survey of Addictive Behaviors <br> and Treatment |  |
| :--- | :--- | :--- | :--- |
| PY | 210 | Abnormal Psychology | 3 |
| PY | 283 | Group Counseling | 3 |
|  |  |  | $\underline{3}$ |

## TOTAL PROGRAM CREDITS

## 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 Tom Neal at 603-271-7127. This program is available evenings only. This program is "financial aid eligible."

## Credits



TOTAL PROGRAM CREDITS $\quad 22-25$

## Prerequisites:

1. 45 college credits in general education courses from an accredited institution (consistent with the requirements of the American Bar Association, which accredits 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

## Continuing Education

Through the Division of Continuing Education, the Institute 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 -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**
Entrepreneurship/Small Business Management*
Hotel Administration**
Human Resource Management*
Management**
Marketing**
Marketing/Sales*
Real Estate
Sports Management
Travel and Tourism**

## Computer Information Systems**

## Engineering Technology

Architectural Engineering Technology
Broadband Networking \& Communications Technology**
Computer Engineering Technology
Computer Technology Programming (Advanced)*
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 Transcription*
Mental Health
Special Education**

## 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.

Center for Training \& Business Development

## Mission Statement

"We provide our customers with bigh 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<br>Development

31 College Drive
Concord, NH 03301
603-271-6663/fax: 603-271-6667
Visit our web site at www.nbti.edu/ctbd/

## LIBPARY



## Library

## (Learning Resources Center)

The NHTI Library has emphatically entered the $21^{\text {st }}$ 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 new 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 new 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, the new 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, CDROMs, 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. When completed, this space will have 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 | $4: 30$ p.m. | $-10: 30$ p.m. |
| :--- | :--- | :--- |
| Monday-Thursday | $8 \mathrm{a} . \mathrm{m}$. | - |
| 10:30 p.m. |  |  |
| Friday | $8 \mathrm{a} . \mathrm{m}$. | - |
| Saturday | 9 a.m. | -5 p.m. |
| 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

The Learning Center (TLC) provides free academic support services to help students achieve success in their coursework and reach their educational goals. Students are encouraged to visit the Learning Center to explore the resources and services offered: Academic Advising \& Study Skills, Tutoring, Writing Center, Math Lab, Computer Lab, Career Exploration, Disabilities Services, and Placement Testing.

## Academic Advising \& Study Skills

Advisers work with students who wish to identify their learning preferences, strengths and weaknesses in order to achieve educational success. Students may also request assistance in academic strategies such as organization and time management, lecture note taking, learning from textbooks, and performing well on tests and exams.

## Assessment Testing

All students entering programs at NHTI, whether they plan to take courses full-time or part-time, are required to complete placement 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 placement tests.
Students will be assessed in the areas of writing, reading comprehension, math, and study skills. 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 searching can use specialized software to help them determine their interest areas, research careers in those areas, search for 4-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. Choices Career Exploration software is available to assist in determining career choices based on a student's interests, aptitudes, and work values.

## 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. Through computer tutorials and practice exercises, students learn at their own pace while getting 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 or PC Application labs. Students can also speed up their typing, reinforce biology concepts, and research careers using software in our lab. 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.

Software that magnifies text, reads text displayed on the screen, and writes text dictated by students is available for students with disabilities. Specialized software helps non-native speaking students develop English language skills and prepare for the TOEFL exam.

## 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. 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. Students with disabilities who do not choose to disclose a disability are not eligible for disability services. Accommodations for disabilities are based on documentation and individual needs. Information regarding students' disabilities is kept confidential according to law.

## 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. Many math tutors can also assist with Chemistry, Physics, and Accounting.

## 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 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 or check our web page via the NHTI website 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 Learring English in the Cultural Context for learners with limited English proficiency, and Job Related ESL Training Session that can be offered on site.


## 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.


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 backegrounds. 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 belp people in the community with professional development in a variety of areas, including business, bealth care, counseling, education, travel and more."

## 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.

## Orientation Program

The New Hampshire Technical Institute Orientation Program's primary objective is to ensure that all students experience a smooth transition to college life. Students will have the opportunity to meet faculty and staff, and learn more about the organizations and activities that are available. Thus, it is strongly urged that students participate in the orientation activities offered prior to the beginning of Fall and Spring semesters.

## Bookstore

The campus bookstore is located in the new 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. Personal checks with a value of up to $\$ 10.00$ weekly will be cashed. No twoparty checks will be cashed. A charge of $\$ 15.00$ will be made for each check returned to the Bookstore from the bank. Further check cashing privileges will be curtailed until the returned check and fee have been paid. All checks are subject to bank verification.



## 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 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 the Institute's food service.

## Food Service

The Institute's food service provides meals and snacks at moderate cost. The dining hall is open seven days a week, serving three meals a day Monday through Friday (two meals on Saturday and Sunday) except on holidays and during Institute vacations.

Residence Hall students must purchase meal permits for the dining room. Commuter students may purchase individual meals on a cash basis in the dining hall or in the Sweeney Hall Snack Bar.

## Campus Security

The Security Department operates 24 hours a day, 7 days a week. Officers conduct vehicle and foot patrols on campus and are charged with the enforcement of federal, state and local laws, as well as Institute policies and regulations. Although campus security officers do not make arrests, the Security Department maintains a working relationship with the New Hampshire State Police and the Concord Police Department. The Security Department keeps daily logs and entries that are available to the public within two days of an event.

## 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 Security, the Vice President of Student Affairs or from NHTI's web site at www.nbti.edu.

## Intercollegiate Athletics

New Hampshire Technical Institute recognizes that its primary emphasis is to provide a high quality education, but it also recognizes that many students desire to experience the challenges of intercollegiate athletics. To that end, the Institute has developed a program that offers the intercollegiate student-athlete an opportunity to compete on several levels of competition. Teams include men's and women's soccer, men's and women's basketball and men's and women's volleyball, as well as baseball and softball. Several teams have enjoyed great success in the past, advancing to championship play. Numerous student-athletes have earned individual honors as well. Please contact the Athletic Department for information regarding current conference affiliations.

## 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, gym hockey, 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.

## Student Clubs and Organizations

Alternative Spring Break Club
Amnesty International Club
Campus Activities Board
Campus Pride
Christian Fellowship Club
Computer Information Technology Team (C.I.T.T.)
Criminal Justice Club
The Cultural Exchange Club
Drama Club
Film Society
Human Service Club
Institute of Electrical \& Electronic Engineers, Inc. (I.E.E.E., Student Chapter)

National Education Association, Student Association at NHTI
NH Junior Dental Assistants Association (NHJDAA)
NHT EYE (NHTI's literary magazine)
North Hall Council
Outing Club

Paramedic Student Organization (PSO)
Phi Theta Kappa International Honor Society
Recycling Club
Roentgen Ray Society
Society of Manufacturing Engineers (SME)
South Hall Council
Sports Management Club
Strout Hall Council
Student American Dental Hygienists Association (SADHA)
Student Early Childhood Association (SECA)
Student Nurses Association (SNA)
Student Senate
Sustainable Energy Ventures (SEV)
The Voice (student newspaper)
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 Institute 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.

## 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/facultyplanned 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.

## Community Service

New Hampshire Technical Institute is a participating member of Campus Compact for New Hampshire. Campus Compact for New Hampshire 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.

New Hampshire Technical Institute is the recipient of the Campus Compact National Center for Community Colleges 2000 Service-Learning Collaboration Award in the category of Collaboration with Social Agencies. In the fall of 1999 a partnership was established between NHTI and the Concord Boys and Girls Club and several other community agencies providing opportunities for students to do community service.


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 2002-2003 academic year, over 35 Federal Work Study positions were offered at the Concord Boys and Girls Club, the Concord City Prosecutor's Office, The Friendly Kitchen, the Christa McAuliffe Planetarium and the United Way among others.

Following the development of the Alternative Spring Break Club in 2000, 60 students, faculty and staff have traveled to Warm Springs, Georgia to provide service to the Institute of Rehabilitation. Over 130 volunteers from NHTI have assisted with service projects both on and off campus. Student leaders have received various awards for their efforts.

Community Service also touches the classroom, through NHTI's commitment to Service Learning. Service Learning is the infusion of a community service project into the curriculum of a course, to enrich the educational experience and to provide meaningful service to the community. A Service Learning Organization, comprised of students, faculty and staff has been formed to assist with the development of such courses and projects.

The college must ensure that individuals (customers, employees, etc.) 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 judgment, accept direction and guidance from a supervisor or faculty member, and establish rapport and maintain sensitive interpersonal relationships with employees, customers and clients

The growing number of and interest in community service initiatives at NHTI demonstrate its commitment to fostering participation in the life of the community.

## 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 the Institute 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 comprised about 20 percent of the graduating class.

While graduates of the Institute are prepared to enter a national labor market, 95 percent of those working full-time took 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 at the Institute, 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 Little Hall.

## Counseling Services

New Hampshire Technical Institute's Counseling and Placement Department's 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.

## Health Services

The Health Services office is located on the first floor of MacRury Hall. Office hours are Monday-Friday, 8 am to $4: 30$ p.m. Summer hours are 8 am to $4 \mathrm{p} . \mathrm{m}$. 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 physical, 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 271-7153.


#### Abstract

Alumni The Alumni Association of the Institute numbers over 10,000 strong. This Association plays an integral role in job placement, academic direction, fund raising, and serves as a valued resource for the future of the Institute.


## ACADEMIC REQUIPEMENTS 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" or "no pass," with full course credit granted for a grade of "pass." A student receiving a grade of "no pass" in an examination representing a required course will be required to satisfactorily complete that course.

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 midsemester warning reports 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
$0-13$
$14-27$
$28-40$
41 or more

> Minimum Acceptable
> Grade Point Average
> 1.5
> 1.7
> 1.8
> 2.0 (1.9 for students who ma-
> triculated prior to the Fall 1995
> semester.)

## 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 the Institute. A matriculated student suspended from the Institute 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.


## Other Suspension Guidelines

1. NP or $F$ in clinic
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 78 .

One requirement of the Conditional Probation is to attend an orientation session during the week before classes begin. Adjustments to the agreement could 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

$0-13$
$14-27$
$28-40$
41 or more

## Minimum Cumulative

Grade Point Average
1.5
1.7
1.8
2.0 (1.9 for students who matriculated prior to the Fall 1995 semester.)

* In the event that a student seeks eligibility to participate on an intercollegiate athletic team, conference rules, if more stringent, will takee precedence over Institute regulations.


## Attendance

Registration for any course presupposes that the student will attend all scheduled classes, laboratories, and clinics. Each student is responsible for meeting all course requirements. 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.

Individual faculty members may have specific attendance requirements which will be made known to students during the first week of a class. However, it is the policy of the Institute that when the number of absences, for any reason, in a given course exceeds the number of times that course meets in one week, the student may be suspended from that course at the discretion of the instructor. Such suspensions will be indicated through the issuance of the grade of "AF." Where both classroom and laboratory/clinic sessions are involved, they will be treated as separate issues.

Any student who has been suspended or dropped from a course under this policy may appeal to the Academic Standards Committee through the Vice President of Academic Affairs.

## 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 a review by the Academic Standards Committee at the end of each term. The student will be informed of the decision in writing by the Admissions Office.

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 if performance or behavior is deemed unsatisfactory or unsafe as a result of an evaluation conducted by a faculty member/agency supervisor in accordance with department criteria and procedures. A review of all circumstances leading to the removal will be conducted by the department involved.

A written report and/or documentation of the evaluation, results of the departmental review and the recommended academic action (suspension or dismissal) will be submitted to the Vice President of Academic Affairs. The case will be referred immediately to the Academic Standards Committee which will hold a hearing as soon as possible. The student involved may attend classroom instruction, but not the clinic/ practicum/internship, pending the hearing and action of the Academic Standards Committee.

## 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 of 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 may take a course 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/out-
comes for a course independently under the guidance of a qualified faculty member. However, the student must 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. Nonmatriculated 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 takee a Directed Study for a course or a Credit-by-Exam 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 for all proposals for Directed Study.

Grading of a Directed Study 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: Less 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
A $\quad 4.0$ pts
A- $\quad 3.7$ pts

| B+ | 3.3 pts |
| :--- | :--- |
| B | 3.0 pts |
| B- | 2.7 pts |
|  |  |
| C+ | 2.3 pts |
| C | 2.0 pts |
| C- | 1.7 pts |

C (2.0)

| $\mathrm{D}+$ | 1.3 pts |
| :--- | :--- |
| D | 1.0 pts |
| $\mathrm{D}-$ | 0.7 pts. |

F $\quad 0.0 \mathrm{pts}$

P
PP
NP

## Definition

An honor grade representing achievement of a level of understanding and ability which is excellent and distinctive.

Represents achievement of a level of understanding and ability of consistently high quality.

Represents achievement of a level of understanding and ability consistent with those levels required for successful entry into the student's chosen career field. The lowest acceptable passing grade in courses with $009,010,011,012,013$ and 015 numbering.

Represents some evidence of achievement, but substantially below the level required for successful entry into the student's chosen career field.

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.

## Pass

Provisional pass; warning (in clinic courses). 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. The faculty member has three calendar days to render a decision on a grade appeal. If the situation cannot be resolved, or if the nature of the dispute precludes discussion with the instructor, the student has five calendar days from the time of the faculty member's decision to appeal the grade to the Department Head of the faculty member. The Department Head will attempt to resolve the dispute either through discussion with the instructor, or with the student in the company of the faculty member. The Department Head will have three calendar days to render a decision. If the matter still cannot be resolved, the student has five calendar days from the time of the Department Head's decision to appeal the grade to the Vice President of Academic Affairs. The Vice President of Academic Affairs will have three days to render a decision.

A course grade may only be changed by the instructor. However, in a case of obvious computational error or blatant abuse of the grading prerogative, the Vice President of Academic Affairs is authorized to change a grade.

Any change of grade must be processed by the instructor through the Registrar's office using the appropriate form.

For a grade appeal based on an alleged incident of cheating or plagiarism, please consult the Office of Academic Affairs or the online Student Handbook at www.nhti.edu.

## 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 $\mathrm{B}+, \mathrm{C}-, \mathrm{A}, \mathrm{D}$, and C respectively, his or her GPA for the semester would be calculated in the following manner:

| Letter <br> Grade | Credits |  | Point <br> Value | $=$ | Grade <br> 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 | $\underline{5}$ | X | 2.0 |  | $\underline{10.0}$ |
|  | 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 (1.9 for students who matriculated prior to the Fall 1995 semester) 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 (1.9 for students matriculating before 1995) 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 2003 Completions - October 24, 2003
Spring 2004 Completions - October 24, 2003
Summer 2004 Completions - May 7, 2004
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 $\$ 60.00$ 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 Institute 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, for students who matriculate into a program as of the Fall 1995 semester.
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.

## 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 fulltime 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 389 full-time, first-time degree/certificate-seeking students entering NHTI in Fall 1998, 221 completed their programs within 150\% of the normal time, resulting in a graduation rate of $57 \%$.

## Inactive Status

Students in good standing who are matriculated in Allied Health programs (Nursing, Paramedic Emergency Medicine, 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 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 ProposalForm is available from the Academic Affairs Office or the Registrar's Office.

The proposal must be approved by: 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. Registration and 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 Courses

Many courses at the Institute are dependent upon knowledge learned in preceding courses. The Institute 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.

## 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 toward a degree one time, with the approval of the instructor and the Department Head, at the time of registration. Further repetition of the course for degree credit will require approval by the Academic Standards Committee. The student's Cumulative Grade Point Average will reflect the most recent course and resulting grade, however, both courses and corresponding grades will appear on the student's transcript.

## 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 in NHTI Cata$\log$ ), 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 all 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 grades are not mailed. Class schedules, 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.

Call the Registrar's Office at (603) 271-7141 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 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 amount of credit 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

The Institute 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, the Institute recognizes its obligation to run courses in the semesters indicated in the program curriculum section of the catalog. Therefore, the Institute will not cancel a day class unless the same or a comparable course is available in the same semester in the evening.

## Withdrawal from the Institute

Should a matriculated student find it necessary to withdraw from all courses at the Institute, 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, Math, 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 (3)
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)
EC 230 Children's Literature (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)

## FINE ARTS

FA 101 Introduction to Drawing (4)
FA 105 Introduction to Music (3)
FA 106 The History of Jazz, Blues and Rock and Roll (3)
FA 110 Art Appreciation (3)
FA 115 History of Modern Art (3)

## SOCIAL SCIENCE

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AN 101 Introduction to Anthropology (3)
AN 110 Introduction to Archaeology (3)
AN 201 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)
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HI 132 World History II: 1500-present (3)
HI 205 History of Russia (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 109 Educational Psychology (3)
PY 205 Crisis Intervention (3)
PY 210 Abnormal Psychology (3)
PY 220 Human Growth and Development (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 225 Issues in Public Policy (3)
SO 240 Marriage, Family and Personal Relationships (3)
SO 298 Study Abroad Experience (3)

## SCIENCE

BI 101 Anatomy and Physiology I (4)
BI 102 Anatomy and Physiology II (4)
BI 111 General Biology I (4)
BI 112 General Biology II (4)
BI 120 Human Biology (3 no lab)
BI 121 Human Biology Laboratory (1 when taken concurrently with BI 120)
BI 122 Basic Pathophysiology (3 no lab)
BI 159 Personal Nutrition (3 no lab)
BI 160 Personal Nutrition Laboratory (1 when taken concurrently with BI 159)
BI 202 Microbiology (4)
BI 211 Genetics (4)
BI 212 Ecology (4)
BI 222 Pathophysiology (4 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 100 Fundamentals of Math with Applications (4)
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)

Please note: Courses are listed in alphabetical order by letter prefix, not 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.

## 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 instructor)

## 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, prisonbased 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 coopera-
tively 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 185)

## 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)

## 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)

## AD 270 Advanced Seminar in Addictive Behaviors Counseling

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 292 Alcohol and Drug Abuse Counseling Practicum II*

2-10-5
This second practicum experience offers 30 hours of group clinical supervision and opportunities to research, observe, role-play and practice the functions of Assessment; Treatment Planning; Case Management; Crisis Intervention; Referral; Consultation; and Child, Family and Community Education in an approved clinical setting. Only for students who matriculated prior to and including January 2000. (Prerequisite: AD 291)

## AD 293 Alcohol and Drug Abuse Counseling Practicum III*

The third practicum experience will offer 30 hours of group clinical supervision and opportunities to research, observe, role-play and practice Individual, Group, Family and other counseling skills in an approved clinical setting. Only for students who matriculated prior to and including January 2000. (Prerequisite: AD 292)

## AD 294 Internship I: Orientation to Addictive Behaviors Counseling*

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 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 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 state-wide continuum-of-care. (Prerequisite: AD 294)

* 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 $21^{\text {st }}$ 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 preColumbian 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 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 com-puter-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)

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 <br> 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 \&

 MaterialsThis 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 2 D or 3 D 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. The students learn to utilize "object parameters" capabilities of ADT to generate all drawings from a single data set as they are perfectly coordinated and automatically updated throughout the entire design process. (Prerequisites: CAD 101, CAD 102, AR 190 or Instructor's approval; corequisite: AR 192)

## AR 192 Revit

3-0-3
Autodesk $\left(\begin{array}{l}\text { Revit } ® \text {, a parametric building modeler based on parametric }\end{array}\right.$ 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. (Prerequisites: CAD 101, CAD 102 and AR 190 or Instructor's approval; corequisite: AR 191)

## AR 193 3D Studio 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 191 and AR 192 or Instructor's approval)

## 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: AR 240)

## 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)

## AR 270 Construction Management

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 indepth 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, AR 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 101 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 level biology and chemistry with lab or permission of the Department Head of Chemistry and Biological Sciences.)

## BI 102 Anatomy and Physiology II

## 3-2-4

A continuation of BI 101. 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 101 or permission of Department Head of Chemistry and Biological Sciences)

## 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 better.)

## 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 120 Human Biology
3-0-3
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 121 Human Biology Laboratory

0-2-1
A series of laboratory experiences designed to enhance and reinforce the concepts presented in BI 120, Human Biology. (Must be taken concurrently with BI 120).

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 the Department Head for Chemistry and Biological Sciences.)

## BI 159 Personal Nutrition

3-0-3
An introductory course 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.

## BI 160 Personal Nutrition Laboratory

0-2-1
A lab course intended to provide deeper exploration into the concepts presented in Personal Nutrition (BI 159). Topics will include scientific method, food analysis, and diet and nutritional lifestyle analysis. (Must be taken concurrently with BI 159.)

## 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 102)

## 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 101, or BI 202, and MT 123 or equivalent; or permission of the Department Head for 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 the Department Head for 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 102 or permission of the Department Head for 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 102 or BI 159, or permission of the Department Head for 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 the Department Head for Chemistry and Biological Sciences.)

## Broadband Networking \& Communications Technology

## BN 101 Introduction to Broadband Technology 3-0-3

A study in the history of electronic communications, from the telegraph to analog and digital telephone, T1 and ISDN. The development of broadcast radio and television, the evolution of CATV from the early community antenna systems of the 1950s to the multi-function systems of today and the evolution and application of fiber optics in modern communications are examined. This course also provides an overview of microwave, antenna and satellite communications as well as the rise of Internet communications, ATM, Frame Relay and SONET applications. (Corequisite: BN 109 or permission of instructor)

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 nonsinusoidal 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: BN 109, EL 101, EN 101 and MT 133; or permission of the instructor)

## BN 109 Computer Technology for ET

This course is designed to prepare technology students with a wide range of computer literacy skills necessary for future study of computer hardware and software. Considered a Technology foundation course, BN 109 will provide a fundamental background in number systems, character codes, digital logic, computer architecture, MS-DOS command language, Windows operating system, networking hardware, transmission media as well as software application installation, understanding the use of protocols and device drivers, and utilization of application software for quantitative analysis, system analysis and documentation. (Corequisite: MT 133; or permission of the instructor)

## 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 ; Corequisite: BN 109 or permission of the instructor)

## BN 201 Fiber Optics and Transmission Lines

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.

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: BN 109, MT 133; Corequisite: BN 201 or permission of the instructor)

## BN 240 Data and Internet Communications

An in-depth survey of the structure and regulations of the telecommunications industry. The basic principles of data communications, protocols, switching systems, T1, ISDN, FDDI, multiplexing and networking are introduced. IP addressing and routing are included. ATM, Frame Relay and SONET protocols are included. Data communications components, such as modems, hubs, routers, bridges, RS-232 interfaces, the TCP/IP protocol, codes and techniques are identified. Methods for selecting implementing and managing a Local, Wide, Metropolitan or Global area communications network system are reviewed.

## 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: BN 205, EL 210; Corequisites: BN 206, BN 240; or permission of the instructor)

## Business

## 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 165 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.

## 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, 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.

## BU 220 Entrepreneurship

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
The necessity of law is studied with its adjudication through the various types of courts, leading to the study of contracts which are the foundation of all business endeavors. Commercial papers will also be studied.

## 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 bumanities elective.

## 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 the Instructor)

## 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 break- even 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 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
Students in this course learn to develop the information necessary for marketing decision-making. This 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. (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)

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)

## Computer Aided Design

## CAD 101 AutoCAD 2D <br> 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. AutoCAD 2 D course structure 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. (Corequisite: AR 191)

CAD 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 $C A D$ certificate program. (Prerequisite: CAD 101)

## 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)

## Chemistry

## CH 100 Introductory Chemistry <br> 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 <br> 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 the Department Head for 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
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 the Department Head for 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 the Department Head for Chemistry and Biological Sciences)

## Criminal Justice

## CJ 101 Introduction to Criminal Justice <br> 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
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 Correction 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

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.

## Computer Engineering Technology

## CP 107 Introduction to Programming with C++ <br> 2-3-3

Introduces the student to program design using the language $\mathrm{C}++$. 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. (Corequisites: EL 115 and MT 133; or permission of instructor.)

## 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; Corequisite: CP 215; or permission of the instructor.)

## 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 \& $\mathrm{D} / \mathrm{A}$ 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 instructor.)

## 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 the instructor.)

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 $\mathrm{C}++$ 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 instructor)

CP 240 Programming for Windows Operating Systems 3-3-4 This course focuses on understanding advanced concepts in operating systems. Microsoft Windows will be the operating system studied using Microsoft Visual Studio.Net intergraded development environment primary programming languages. These languages will include Visual Basic. Net and C\#. As currently appropriate, a review of languages Visual Basic 6 and Visual $C++$ will be included. 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 including ASP.Net and ADO.Net as well as Web Services for distributed applications on the Internet. Experience will be gained using extensive hands-on laboratory assignments. (Prerequisites: CP 107 and CP 235; Corequisite: CP 252; or permission of instructor.)

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), the socket application programmers interface (API) and internet applications. SQL subtopics include relational database concepts, the SQL language and relational database design. The socket API subtopics include learning the API commands and writing programs in both a Linux and Windows environment which permit single and multiple connections to be made over a network. Internet application subtopics include the study of the domain name system (DNS), dynamic host configuration protocol (DHCP), electronic mail protocols, file transfer protocol (FTP), the hyper-text transfer protocol (HTTP) and the simple network management protocol (SNMP). Additional internet applications may also be studied. 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 the instructor.)

CP 260 Computer Real Time Interfacing
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 Java. Both projects are presented in class. (Prerequisite: CP 107; Corequisite: CP 235; or permission of instructor.)

## CP 301 Computer Project Definition

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 the instructor.)

## 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 instructor. Strongly recommend having previously taken or to be concurrently taking CP 222, CP 240 and CP 252.)

## 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)

## Civil Engineering Technology

## CV 191 Land Development 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 mapping, topography, site development, and subdivision. Within the field of highway design the student applies civil design software to detail roadway alignment and creates 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 191 or AR 104, and CAD 101, CAD 102 and IS 166, or Instructor's approval)

## CV 192 Civil Design

3-0-3
This course explores how Autodesk Civil Design software works in concert with AutoCAD Land Desktop software with tools for analyzing project data and creating drawings automatically for transportation engineering, site development, hydrology, and hydraulics tasks. The access to centralized project data through AutoCAD Land Development Desktop enables students to effectively utilize the civil engineering add-on for generating drawings for a project. (Prerequisites: CV 191 or Instructor's approval)

## CV 193 Survey CAD

3-0-3
This course introduces students to AutoDesk Survey software and its capabilities to automatically generate drawings by interfacing with a host of industry-standard surveying instruments, and automatically creating
linework, points, symbols, and terrain-model breaklines directly from field survey data in the AutoCAD environment. The students learn to use this software efficiently and how to eliminate several steps and keystrokes for streamlining the data collection-process. (Prerequisites: CV 191, some surveying knowledge or Instructor's approval)

## 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 IS 166, or by permission of instructor.)

## 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

 3-2-4The 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)

## Dental Auxiliaries

## 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 101, DN 100, DN 113 and DN 134)

## DN 105 Dental Radiology for Dental Assisting

 2-3-3Lectures 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

0-9-3
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

0-9-3
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 101, 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

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 101 or permission of the Department Head)

## 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 set-ups, 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
1-2-2
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 101, and BI 102)

DN 241 Community Dental Health
3-0-3
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 275 Dental Assisting Theory II $\begin{gathered}\mathbf{1 - 2 - 2} \\ \text { A course designed to introduce the dental advanced functions to dental }\end{gathered}$
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 2-8-4 (6 weeks)
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)

## Diagnostic Medical Sonography

## DS 201 Principles of Sonography <br> 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-theart equipment technology. (Prerequisite: DS 201)

## DS 233 Seminars in Sonography

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
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

A continuation of Sonographic $\mathrm{OB} / \mathrm{GYN}$ 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)

## 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. (Prerequisites: AR 101 or $\operatorname{AR~104,~and~CAD~101,~CAD~102,~and~IS~166,~or~}$ Instructor's approval)

## 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 3 D 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 Instructor's approval)

## 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. (Prerequisites: AR 191 or AR 104, and CAD 101, CAD 102, and IS 166 or Instructor's approval)

## Early Childhood Education

## EC 102 Foundations in Early Childhood Education and Child Care

The history of early childhood education and childcare, including the contributions of Froebel, Pestalozzi, Montessori, Wheelock and Dewey as well as the diversity of programs, childcare, Head Start, kindergarten, nursery, profit and nonprofit will be addressed. Discussion will include perspectives from the past as well as current trends, theories and approaches to the care, development and education of young children.

## EC 120 Growth and Development of the Young Child 3-0-3

 Major theories and research findings in the physical, cognitive and psychosocial development of young children from conception to age eight will be the focus of this course. Particular note will be given to the work of Erikson and Piaget. Infants, toddlers, preschool and school-age children will be observed using professional strategies for assessing and recording behavior. Emphasis will be placed on applying understanding of children's developmental needs in a pluralistic society.EC 135 Dynamics of Curriculum Development
4-0-4
Designing, implementing and evaluating appropriate programs and activities for children through age eight. 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. Participants will experience and broaden their own creativity and imagination through learning activities that can be applied to their early childhood settings.

## EC 140 Sociology of Children and Families

3-0-3
An overview of the interpersonal behavior between children and significant others with emphasis on six major areas: the family; a sociological
approach to understanding children in relation to their families; children's social development; the effects of poverty, child abuse and neglect, homelessness and divorce; examining interpersonal behaviors within childcare settings; and child advocacy. (Prerequisites: EC 102 or EC 120)

EC 175 Environments for Young Children 4-0-4
Students will experience visiting and designing developmentally appropriate new environments and modifying existing ones to be child and family friendly, barrier free and inclusionary. Emphasis will be on planning aesthetically pleasant, safe, healthy spaces which nurture and educate and also meet state regulatory agency requirements. An additional component added to this course will be orientation to Practicum including developing individual goals, planning contracts, logistics of schedules and professional and ethical considerations. Further, students will visit a minimum of three different settings, observe children, interview potential cooperating teachers and submit a report indicating their first and second choices for senior Practicum. (Prerequisites: EC 102, EC 120 and EC 135)

EC 185 Health, Nutrition, and Safety in ECE 2-0-2 An introduction to major issues affecting the health and safety of young children in family and center-based care. Nutrition and policy considerations about pediatric medications, infectious disease control, sick child care, universal precautions and liability, and health record keeping will be highlighted. This course is offered for Early Childhood Education students; others by permission of the Department Head of ECE.

EC 210 Infant/Toddler Development
3-0-3
A study of important influences on infant and toddler development, with emphasis on the role and responsibilities of parents and childcare providers in creating high quality, supportive environments, with sensitivity to attachment and the importance of communication skills in nurturing positive parent/teacher/child relationships. (Prerequisite: EC 120)

## EC 220 Developmentally Appropriate Programs

 for School-Aged Children3-0-3
The role and responsibilities of early childhood educators and child care providers in creating developmentally appropriate experiences for schoolage 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 230 Children's Literature

3-0-3
An overview of children's literature with opportunities to explore various authors. Students will become familiar with criteria for Caldecott and Newbury awards, names of exemplary authors and illustrators of children's literature; and learn ways to extend and enhance children's interest and language through books and story telling. Poetry, books that explore multicultural topics and an introduction to bibliotherapy as it applies to Early Childhood Education will also be discussed.

EC 231 Early Literacy Development
3-0-3
Early literacy development involves listening, speaking, drawing, writing, singing, 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 260 Organization and Management in Early Childhood Education

3-0-3
A survey of organization and management of early childhood programs and/or child care centers. Emphasis will be on learning how to plan, organize, manage and evaluate programs and facilities for children; ex-
ploring the dimensions of record keeping; federal and state funding; licensing procedure; hiring, motivating and evaluating staff; and parent involvement. Students will be required to spend fifteen hours, direct experience assigned to an early childhood director/administrator and show documentation as appropriate. (Prerequisites: EC 102; EC 120; and EC 135)

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 280 Senior Seminar in Professional Development 3-0-3
This capstone course, for early childhood matriculated seniors only, addresses two major themes: the early childhood educator as a professional and early childhood education toward the 21 st century: a world-wide perspective. Topics include local, state, national and international trends and legislation, child advocacy, research and professional development. Students will demonstrate proficiency in seminar/workshop presentations, professional portfolio development and complete performance goal requirements for an Associate Degree in Early Childhood Education. (Prerequisite: matriculated seniors only and with permission of Department Head)

EC 285 Early Childhood Education Practicum I 2-10-5 Students will work in approved (licensed and preferably NAEYC accredited) child care centers and preschools; independent or public schools ( K 2); parent/child centers or Headstart programs under the supervision of professionals certified in early childhood education. Weekly seminars, coordinated by NHTI faculty, offer instruction in classroom observation techniques and curriculum planning, as well as support for students. Periodic conferences between students, cooperating teachers and NHTI Practicum Supervisors are scheduled to review and evaluate student progress. Students must complete a journal of professional experiences documenting connections between theory and practice, and a portfolio of curriculum activities, developmentally appropriate to the age of children in the practicum setting. (Prerequisites: All freshmen Early Childhood Education courses, a 2.5 GPA in major field courses and permission of Practicum Coordinator. ECE students must also complete CPR and First Aid certification and submit to Criminal Records and Child Abuse/ Neglect Central Registry Check (RSA 170-ET, State Registry and Criminal Records Check I-V ))

## EC 293 Early Childhood Education Practicum II 2-5-3

 EC 294 Early Childhood Education Practicum II 2-10-5Students will work in approved (licensed and NAEYC accredited) childcare centers and preschools; independent or public schools (K-2); parent/ child centers or Headstart programs under the supervision of professionals certified in early childhood education. Weekly seminars provide support, guidance and instruction in student teaching protocols as well as opportunities to plan and teach developmentally appropriate activities. Periodic conferences between the cooperating teacher and NHTI Practicum supervisors are scheduled to monitor and review student progress. Students must complete Early Childhood Professional journals according to program requirements. Decisions regarding selection of Practicum II will be based on students' needs, faculty recommendations and departmental approval. (Prerequisite: EC 285 or permission of Practicum Coordinator and a 2.5 GPA in major field courses. ECE students must also complete CPR and First Aid certification and submit to Criminal Records and Child Abuse/Neglect Central Registry Check (RSA 170-ET, State Registry and Criminal Records Check I-V))

## Education

## ED 101 Introduction to Disabilities

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, preservice teachers and paraeducators will develop strategies on how to facilitate students' independence, learning, social connections, and selfadvocacy 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.

## 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.

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 Paraprofessionals with effective positive approaches that respect the dignity of the individual and facilitate social inclusion (Prerequisite: ED 101 or permission of faculty member.)

## 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 105, 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 105 or permission of the faculty member.)

ED 203 Teaching Strategies for Students with Disabilities 3-0-3 The focus of this course will be on strategies to accommodate students who have difficulties with basic reading and writing skills. Emphasis will be placed on accommodating students versus "helping" students by completing work for them. Students will work a minimum of 20 hours assisting a student with special needs in a classroom setting or as an individual tutor. Students will maintain a record of their work with their student(s) and through presentations, delineate the techniques and strategies that were incorporated into the work they do with their student(s). In addition, students will learn a variety of study strategies, including mnemonics, double column notes, reading strategies, concepts
of active vs. passive learning and organization/time management skills. Innovation and creativity will be key to success in this course. (Prerequisites: ED 101 and EN 101; or permission of faculty member)

## 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 105 or permission of the faculty member)

## 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 105 or permission of the faculty member)

## ED 220 Field Experience in Education

## 1-6-3

Practical experience in a learning environment. The student spends a minimum of two* hours per week ( 30 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 the faculty member) (*more bours may be scheduled to meet the specific transfer requirement of a student's chosen baccalaureate program through consultation with the Program Professor)

## ED 230 Essentials of Career and Technical

Curriculum and Instruction (Pending approval)
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

## 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. Direct current, alternating current, Ohm's law, series circuits, parallel circuits, as well as energy and power relationships are covered in detail. This course also covers D-C circuit analysis techniques including mesh and nodal analysis, and network theorems such as Norton's, Thevenin's, and maximum power transfer. Vector algebra and phasors are introduced and used in analysis of A-C circuits. The reaction of capacitors and inductors when D-C and A-C voltages are applied are discussed as well as an introduction to various circuit analysis techniques. Laboratory experiments are designed to reinforce the classroom work. (Corequisite MT 133; or permission of the instructor)

## 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 the instructor.)

## 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) 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 instructor)

## EL 144 Embedded Microsystems

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 instructor)

## 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)

## 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, $\mathrm{A} / \mathrm{D}$ and $\mathrm{D} / \mathrm{A}$ 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 Instructor)

## EL 226 Digital Electronics

3-3-4
This course covers switching circuits and digital logic. Base 2, 8, and 16 number systems, codes, and Boolean algebra (switching algebra) are covered and used throughout the course. The popular integrated circuit logic families are studied, along with their internal circuitry and rules for interconnecting and interfacing. Other topics include Karnaugh map minimization, combinational logic, sequential logic, synchronous logic, asynchronous logic, registers and counters, decoders, code converters, programmable logic devices, computer bus and interface circuits. The laboratory is an integral part of the course and provides valuable experience in breadboarding, testing, and debugging digital circuits. (Prerequisite: EL 110) The final offering of this course will be Fall 2003 and only for those students determined by department head.

## 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)

## 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 shall be 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 instructor.)

## 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 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 instructor.)

## Emergency Medical Technician

## EMT 100 Emergency Medical Technician Basic <br> 0-7-3

This course is designed to meet the 1994 DOT guidelines and provide students with knowledge and skills to complete certification as a N.R. EMT-Basic. Three institutional credits awarded for this course do not count toward graduation courses but are calculated into GPA.

EMT 101 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. (Prerequisite: EMT 100; Corequisite: EMT 104)

## EMT 102 Basic Life Support Field Clinic <br> 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. (Prerequisite: EMT 100; Corequisite: EMT 105)

## EMT 103 Basic Life Support Field Clinic

 0-9-3This 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. (Prerequisite: EMT 100)

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. Three institutional credits awarded for this course do not count toward graduation courses but are calculated into GPA. (Prerequisite: EMT 100)

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. Three institutional credits awarded for this course do not count toward graduation courses but are calculated into GPA. (Prerequisite: EMT 100).

## English

## EN 100 Introductory English

4-0-4
Designed to prepare the student 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 three 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 better 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.

## 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.

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.

## 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 indepth 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

 3-0-3This 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 EN 101 or equivalent and an introductory level literature course are highly recommended.)

## EN 251 Contemporary Drama

3-0-3
A seminar discussion of major drama since the 19 th 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.)

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. (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.)

## 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.

## Fine Arts

## 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. Course will be offered at the Kimball-Jenkins Community Art School on N. Main Street in Concord; students will pay \$35-50 for supplies and materials in addition to tuition and fees.

## 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 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.

## Foreign Language

## FL 100 Conversational French

3-0-3
This course is intended to provide students with sufficient knowledge of conversational French to work in the travel industry.

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 <br> 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 the Instructor)

## 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 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 120 Conversational Spanish

3-0-3
This course will serve as an introduction to the Spanish language for travelers or those who need to learn Spanish for business purposes. The course will focus on learning a variety of simple sentence construction and the basic necessities of Spanish grammar. Vocabulary will be acquired to facilitate the capacity to engage in spontaneous and useful spoken Spanish.

## 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 the instructor.)

## 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

## General Studies

## GS 100 General Studies Seminar

1-0-1
This course will assist General Studies majors in indentifying 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
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

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.

## 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 205 History of Russia

3-0-3
Russia has grown over the centuries through consolidation and conquest into the largest country in the world. It has a rich and turbulent history. This course will focus on political, cultural and social developments from the formation of the first Russian state to the present. Topics include early consolidation and struggles with invaders, rise and fall of the tsarist aristocracy, the Bolshevik Revolution, rise of Russia to a world power, the Soviet regime and its disintegration and present attempts at reorganization.

## Hotel Administration

HR 115 Hotel 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/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 the instructor)

## 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 approval of the Department Head. (Prerequisite: 2.5 GPA in major field courses and approval of Department Head)

## 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.

## Health Studies

## 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 3M 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)

## 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. (Prerequisites: HU 103, HU 111 and MH 185 with a combined major field GPA of 2.0. For matriculated students ONLY!)

## HU 220 Family Systems, Current Social Issues and 2-0-2

Alternative Health Care Modalities in Human Service
The student will examine and explore a variety of current topics and issues addressing the Human Service Professional in today's workplace. This course provides opportunities to study with professionals in specialty areas and gain knowledge and skill within a variety of areas. Topics addressed in class may include holistic health care modalities such as meditation and Reiki, HIV/AIDS counseling, gerontology, family systems theory, social systems theory, prevention, cultural counseling and diversity issues along with other timely topics.

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. (Prerequisite: HU 193)

HU 296 Human Service Practicum III*
2-10-5
A continuation of HU 295, Practicum II. (Prerequisites: HU 295, PY 210 and PY 283.)

* 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 bead 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.


## Computer Information Systems

## IS 101 Computer Information Systems <br> 2-2-3

The focus of this course is to prepare CIS 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.

## IS 121 Programming Fundamentals

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 or corequisite: IS 101 or permission of instructor)

## IS 147 CIS 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 worke experience in the computer field may request a waiver from the course.

## IS 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: IS 166)

## IS 166 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.

## IS 200 Managing Information Systems

2-2-3
The role of information as a resource for business organizations is the focus of this course. Topics include business systems analysis, application development life cycle, data and system security, and site management. (Prerequisites: IS 101, IS 121 and IS 267 or permission of the instructor)

## IS 210 Object Oriented Programming

2-2-3
This course builds on the work done in IS 121. 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: IS 121)

## IS 228 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: IS 101)

## IS 229 Networking Theory

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: IS 228)

## IS 231 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: IS 229 or IS 230 with minimum grade of "C")

IS 232 Networking Theory III
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: IS 231 with a minimum grade of "C")

## IS 234 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: IS 231)

## IS 235 Advanced Network Design and Troubleshooting 3-2-4

This course is the capstone networking course. 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: IS 232, IS 234 and IS 280)

## IS 240 Visual Basic

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: IS 101 with a minimum grade of "C")

## IS 241 Advanced Visual Basic

This course is a continuation of IS 240 Visual Basic, 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: IS 240 with a minimum grade of "C")

## IS 247 Senior Project Preparation

1-0-1
This course is designed to define the work that will be performed in IS 298 Senior 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: IS 121 and IS 267)

## IS 248 Network Operating Systems

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: IS 101 or permission of Department Head)

IS 260 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 and 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: IS 101, IS 166 or permission of the instructor)

## IS 265 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: IS 166 or permission of the Department Head)

IS 267 Database Management Systems I
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: IS 101 or IS 166)

IS 268 Database Management Systems II
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: IS 240 and IS 267)

## IS 280 Networking Applications

This course is the capstone networking course, examining 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: IS 231 with a minimum grade of "C")

## IS 286 Web Design and Development

2-2-3
This course will examine current technologies related to web site design and development. Topics will include setting up a web server, creating web pages, scripting, and security. The hands-on lab component will include using a web-authoring tool. (Prerequisites: IS 101 or IS 166)

IS 287 Web Design and Development II
This course continues to build on the skills developed in IS 286, with special emphasis on advanced topics such as: using databases, Intranets ("Digital Nervous Systems"), creating professional graphics, web
hosting, web servers, dynamic web pages (Java-ActiveX) and FrontPage web resources. (Prerequisite: IS 286 or permission of instructor)

## IS 291 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: IS 101)

## IS 298 Data Systems Design Project

Capstone course for the Computer Information Systems 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: IS 200 and IS 267)

## Learning Support

Individualized learning support courses for students needing structured guidance including tutoring, application of study skills, and instruction in time management strategies. Students complete contracts addressing their individual needs. Professional tutors monitor and evaluate progress. Must be taken in conjunction with at least one course. 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 an elective to meet graduation requirements, but will count in GPA. Permission of the Disabilities Coordinator or Learning Center Director is required.

LC 111 Learning Skills Support 1-0-1
Students complete individual contracts consisting of a total of 15 contact hours. Students can 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 can register for LC112 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 LC113 by Week 3 of the semester.

## 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 \& Algebra II or NHTI's MT 103 \& MT 104)

## LD 112 Landscape Architectural Drafting and Sketching

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 <br> 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 \& 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. (Prerequisites: LD 112)

## 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 bave 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 bave 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 nonmatriculated 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 class 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.

## Mechanical Engineering Technology

## MC 101 Design Graphics I <br> 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 226 Thermodynamics and Heat Transfer 3-0-3
A presentation of the fundamentals of equilibrium thermodynamics with applications in power production, combustion engines and refrigeration cycles. Also included is a brief study of heat transfer in its three modes: conduction, convection, and radiation. (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 135 and IS 166)

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 200 and MC 250 )

## MC 280 Fundamentals of Geometric Dimensioning and Tolerancing (GD \& T) <br> 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 Y14.51994. Practice in reading and applying the standard will be accomplished with video-taped presentations, discussion periods and workbook practice sessions. (Prerequisite: MC 101 or permission of the instructor)

## 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 and approval by the MET Department Head)

MC 290 Hybrid Vehicle Technology
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 135, IS 166 and PH 133; or permission of the instructor)

# 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
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: IS 166, 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 IS 166)

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 IS 166)

## MF 250 Statistical Process Control

2-2-3
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 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 IS 166)

## Mental Health

## MH 185 Interviewing: Process and Techniques

3-0-3
The course functions mainly as an experiential learning module designed to develop in the student an understanding of the process of interviewing and the skills in the practice of its techniques.

## 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. (Prerequisites: MH 185, HU 103 and HU 111 with a combined major field GPA of 2.0)

MH 295 Mental Health Practicum II*
2-10-5
A continuation of MH 193, Practicum I (Prerequisite: MH 193)
MH 296 Mental Health Practicum III*
2-10-5
A continuation of MH 295, Practicum II (Prerequisite: MH 295)

* 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 bead 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.


## Medical Transcription

## MN 101 Medical Transcription with Lab

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 IS 166 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)

## Mathematics

MT 100 Fundamental Mathematics with Applications 4-0-4
A course in mathematical problem solving. Students will use basic math skills and technology to solve practical math applications. Activities will be chosen from: probability, statistics, geometry, data analysis, finance, and topics related to the students' major field. The four credits awarded for this course will count as graduation credit fulfillment for those programs which require the course; othervise, institutional credit will be granted, which does not count toward graduation requirements but will be calculated into GPA.

MT 103 Introductory Mathematics 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 better and MT 104 with a grade of C or better will satisfy the math prerequisite for MT 123.

MT 104 Introductory Mathematics 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 requirements but are calculated into GPA. Completion of this course with a grade of C or better and MT 103 with a grade of C or better will satisfy the math prerequisites for MT 123.

MT 106 Geometry
A basic geometry course. The following topics are included: parallelism, congruent triangles, inequalities in triangles, quadrilaterals, similarity, right
triangles, circles, area, volume, coordinate geometry, and logic. The five institutional credits awarded for this course do not count toward graduation requirements but are calculated into GPA. (Prerequisite: Successful completion of high school algebra I, or MT 103, or MT 108)

## 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 better and MT 109 with a grade of C or better 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 better and MT 108 with a grade of C or better 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 computer information systems 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 better 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 for students who have successfully completed an elementary algebra course. This course will build on the
students' algebra skills as they become actively involved in solving applied problems chosen from a variety of disciplines. (Prerequisite: successful completion of high school Algebra I or MT 103 or MT 108 with a "C" or better)

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. Prior knowledge of high school Algebra I is assumed.

## 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.

## 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

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.


## Nursing

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 101, BI 102 and BI 202 to enter or progress in the nursing courses. Students who took BI 101, BI 102 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 101, EN 101, and PY 105)

## NU 116 Nursing IIA

6-15-11
The emphasis of Nursing IIA is on the assessment of developmental selfcare 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 101; Corequisites: BI 102 and PY 220) (Semester 3 Prequisite: a minimum of grade " $C$ " in BI 101 and BI 102; 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 selfcare 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 101; Corequisites: BI 102, and PY 220) (Semester 3 Prerequisite: a minimum grade of "C" in BI 101 and BI 102; Corequisite: BI 202)

## NU 177 Upward Mobility Nursing

 2-0-2This 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 a current 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 101, 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 knowledge 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 101, BI 102 and BI 202; Corequisite: PI 242)

## Physics

## PH 100 Pre-Engineering Technology Physics

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

## 3-2-2

 (7.5 weeks)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)

* A Texas Instruments model TI-83+ is required for PH 100, PH 133, PH 135 and PH 202.


## Philosophy

## PI 110 Introduction to Philosophy

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.

## Paralegal Studies <br> * Denotes Certificate Program courses only

*PL 101 Foundations of Paralegal Studies
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

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 the instructor and program coordinator)

## *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 WESTLAW will also be included. (Prerequisites: PL 101 or permission of the instructor and program coordinator)

## 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, products liability, trespass and defamation are addressed in the Torts section of the course. (Prerequisites: PL 106 or permission of the instructor and program coordinator)

## 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 the instructor and program coordinator)

## 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 the instructor and program coordinator)

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 WESTLAW 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 instructor and program coordinator)

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 instructor and program coordinator)

* 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 instructor and program coordinator)

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 instructor and program coordinator)

## 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 instructor and program coordinator)

* PL 261 Criminal Process

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 instructor and program coordinator)

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 instructor and program coordinator)

## 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 lawrelated environment. Weekly meetings will be held with the internship coordinator to discuss the ongoing experience. (Prerequisite: All 100 level PL courses or permission of instructor and program coordinator)

* 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 instructor and program coordinator; Corequisite: PL 110)

## Project Lead the Way®

Project Lead the Way ${ }^{\circledR}$ 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 for the Electronic and Computer Engineering Technology degree programs. This course may also be used to meet the requirement for Elective in the Second Year, Spring Semester in the Mechanical and Manufacturing 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. Assuming successful completion, this course may be used to meet requirement for the Elective in the Second Year, Spring Semester in the Mechanical and Manufacturing Engineering Technology programs.

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. Assuming successful completion, this course may be used to meet the requirement for the Elective in the Second Year, Spring Semester in the Mechanical and Manufacturing Engineering Technology programs.

## 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 PM first year fall courses; Corequisites: PM 130, PM 135, PM 150 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 135, PM 142 and PM 161)

## PM 125 Pharmacology

An advanced course covering Pharmacology related to paramedic practice. Includes cardiovascular, respiratory, analgesic, G.I., antibiotic and CNS medications. (Prerequisites: All previous PM courses and MT 129; Corequisites: PM 111, PM 130, PM 135 and PM 244).

## PM 135 Medical Emergencies

## 2-0-2

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.
(Prerequisite: PM 117; Corequisites: PM 111, PM 125, PM 130 and PM 244)

PM 142 Cardiology I $\quad 2-0-2$
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 135 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 111, PM 125, PM 130 and PM 244)

## 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, Medical Emergencies, and Physical Assessment. (Corequisites: PM 117, PM 135 and PM 142)

## PM 162 Integration Lab II

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, Advanced Trauma, and Pharmacology courses. (Corequisites: PM 125, PM 150 and PM 244)

## PM 163 Integration Lab III

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 Special Populations. (Corequisite: PM 201)

## PM 164 Integration Lab IV

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 knowledge and interventions learned in Field Operations and Advanced Paramedic Practice.

## 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.

## 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 courses)

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.

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).
(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. (Corequisite: PM 164)

## 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 first semester paramedic courses; Corequisites: PM 125, PM 130 and PM 150)

## 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. (Prerequisite: 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; Corequisites: PM 201 and PM 210)

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); Corequisites: PM 202 and PM 277)

## Practical Nursing

## PN 101 Practical Nursing I

3-15-8
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 will be presented. Simulated clinical laboratory and clinical experiences will provide opportunities for mastering basic skills. (Corequisites: BI 107, EN 101, GS 102) (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)

## 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: health deviations, alterations in immune, hematology, and respiratory 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 105)

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 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: PY 220)

## 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.

## 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.

## PY 109 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 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 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

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. (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)

## Real Estate

## RE 101 Fundamentals of Real Estate <br> 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.

## 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 202 Real Estate Internship II
1-10-4
A continuation of RE 201, Real Estate Internship I. (Prerequisite: RE 201).

RE 203 Real Estate Internship III
1-12-5
A continuation of RE 202, Real Estate Internship II. (Prerequisite: RE 202).

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.

RE 221 Real Estate Brokerage Management
3-0-3
This course will focus on the management techniques for small to me-dium-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.

## 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.

## Radiation Therapy

## RTH 101 Introduction to Radiation Therapy

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

2-0-2
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. (Prerequisites: RTH 101 and RTH 110)

## RTH 150 Medical Imaging and Processing

3-0-3
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 101 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 shall 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, pa-tient-centered clinical practice and professional development shall 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 II3-2-4
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, RTH 110 and 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 101 and BI 102)

## 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, RTH 150 and 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 shall 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 shall be discussed, examined and evaluated. (Prerequisite: RTH 293)

## RTH 295 Clinical Practice V

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 shall be discussed, examined and evaluated. (Prerequisites: RTH 293)

## 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 <br> 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.

## 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 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 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 230 Public Relations and Advertising

 for the Sports Industry3-0-3
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: BU 170 or SM 170 and EN 101, or permission from Sports Management Department Head)

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.

## 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.

## 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 instructor)

## SO 212 Intercultural Interactions and Cultural Learning

 3-0-3This 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 225 Issues in Public Policy

3-0-3
This course would provide the opportunity to focus on topical issues in the public policy area, building on matters addressed in previous courses such as SO 105 (Sociology), CJ 210 (Juvenile Justice), CJ 225 (Drug Abuse), PS 120 (Federal Government) and PS 105 (State and Local Government) and allowing the chance to deal with matters bridging those areas. The exact nature of this course in the particular semester would be driven by the nature of the topic selected, allowing the use of the seminar or lecture approach as appropriate. Likely topics might include such areas as gun control or abortion and racism; with the emphasis in the course consistently on the matter of the impact of these issues on the development of public policy and use of resources.

## SO 240 Marriage, Family and Personal Relationships 3-0-3 <br> 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 the Institute'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 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.

## Travel and Tourism

## TR 101 The Tourism System

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 a 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)

## 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 industrytransportation, 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)

## 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)

## 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 ${ }^{\circledR}$ skills such as: queues, international travel and current Worldspan ${ }^{\circledR}$ 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 are required to participate in this course. The additional cost will be assumed by the students enrolled in the course. Allocation: 1 bour of lecture per week for 8 weeks plus 3 full days of field experience. (Prerequisite: Permission of the Department Head)

## 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. Student 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 approval of Department Head)

## Radiologic Technology

## XR 101 Fundamentals of Radiography

This course introduces the students to the basic principles of technique, science and protection, and radiographic machinery. The students will perform hands-on training with the radiographic machine, tube, table and related accessories. Medical ethics will be included in this course.

## XR 116 Image Production and Evaluation I

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 161 Radiographic Positioning and Clinical

 Procedures I3-18-7
Routine radiographic positioning of the osseous system, thoracic and abdominal viscera. 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. (Prerequisites: XR 101, XR 116 and XR 151)

## XR 164 Radiographic Positioning and Clinical

 Procedures II3-18-7
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.
(Prerequisite: XR 161)

## XR 165 Radiographic Clinical Procedures III <br> 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. (Prerequisites: XR 161, 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 161, XR 164, and XR 165)

XR 202 Introduction to CT Scanning
3-0-3
A study of the concepts and practice of Computerized Axial Tomography. Operation of CT Scanners and positioning of the patient for the examination will be presented. Contrast agents and interventional procedures will be explored. CT pathology and correlation will be discussed. Students will rotate through the CT department of their clinical site for practical experience. (Prerequisites: XR 116, XR 220, XR 121, and XR 180)

## XR 220 Image Production and Evaluation II <br> 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. (Prerequisite: XR 161, XR 164 and XR 165)

XR 295 Radiographic Clinical Procedures V 0-32-6
A continuation of XR 294. During the internship, the student becomes completely involved in the clinical aspect of the program. One hour of Registry review and comprehensive testing will take place each week. An approximate total of 480 clinic hours is required. Students must pass both the clinical and comprehensive testing components to pass the course. (Prerequisite: XR 294)

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B.S., Plymouth State College;
M.B.E., New Hampshire College

Shirley Rennie, A.R.N.P.
Professor of Nursing
Nurse Practitioner
A.D.N., New Hampshire Technical Institute;
B.S.N., Rivier College;
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Co-Department Head, Criminal Justice
B.S., St. Anselm College;
M.P.A., Golden Gate University

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Professor of Manufacturing and
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B.S.M.E., University of New Hampshire;
M.S.M.E., Northeastern University

William Perry Seagroves
Professor of Pbysics and Chemistry
B.S., University of New Hampshire;
M.S., University of New England

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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)
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(2002)

Assistant Professor of Computer Information Systems
A.S., New Hampshire Technical Institute;
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Terrance L. Simkin
(1987) Ph.D., University of New Hampshire

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Professor of Math/Physics
B.A., Olivet College;
M.S., The College of William and Mary

Susan Stacey
(2001)

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Diploma, Modern Montessori;
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Family Development Center, Nova Scotia;
B.A., Mount Saint Vincent University (Nova Scotia)

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B.S., Virginia Polytechnic

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M.S.N., Vanderbilt University;

Certified Family Nurse Practitioner
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M.S., Texas Women's University

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(1986) Professor of Computer Information Systems

Department Head, Computer Information Systems
A.A., St. Leo College;
B.S., Southern Illinois University

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(1985) Professor of Radiation Therapy
A.S., Seminole Community College;
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M.Ed., University of Central Florida
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Professor of Computer Information Systems
B.S., Rensselaer Polytechnic Institute;
M.S.B.A., Boston University

Maryellen Walker, R.N.
Professor of Nursing
B.S.N., Seaton Hall University;
M.S., Boston College
R. Stuart Wallace

Assistant Professor of History
B.A., Lehigh University;
M.A., University of New Hampshire;
Ph.D., University of New Hampshire

Professor of Computer/
Electronic Engineering Technology
B.S.M.E., California Maritime Academy;
M.B.A., California State University

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Department Head, Mathematics/Physics
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B.S., Boston College;
M.S.T., Boston College
(2002)

Stanley Zielinski
Professor of Computer Information Systems
A.M., Dartmouth College;
B.S., University of Vermont;

Ph.D., Rensselaer Polytechnic Institute

## ACADEMIC CALENDAR

## Fall Semester 2003

| September | 1 | Residence Halls open - new \& returning students | 12:00 noon |
| :---: | :---: | :---: | :---: |
|  | 1 | Labor Day holiday - Institute closed |  |
|  | 2 | Day and evening classes begin |  |
|  | 6 | Weekend classes begin |  |
| October | 13 | Columbus Day - All classes meet |  |
|  | 15 | System Symposium Day - no day classes; evening classes meet |  |
|  | 24 | Mid-Semester Warnings |  |
|  | 24 | Last day to resolve "I" grades from Spring and Summer 2003 semesters | 4:00 pm |
|  | 26 | Daylight Savings Time ends; set clocks back 1 hour |  |
| November | 2 | Open House | 12:00-3:00 pm |
|  | 3 | Last day to drop a course or withdraw with a "W" grade | 4:30 pm |
|  | 3 | 60\% completion for Financial Aid requirements |  |
|  | 11 | Veterans' Day holiday - Institute closed |  |
|  | 26 | Residence Halls close | 5:00 pm |
|  | 26 | No evening classes |  |
|  | 27/28 | Thanksgiving holiday - Institute closed |  |
|  | 29/30 | No Weekend classes |  |
|  | 30 | Residence Halls re-open | 12:00 noon |
| December | 1 | Classes resume | 8:00 am |
|  | 12 | Classes end |  |
|  | 15-18 | Final Exams |  |
|  | 18 | Residence Halls close |  |
|  | 19 | All grades due | 4:00 pm |
|  | 24 | Grades available on Student Information System |  |
|  | 25 | Christmas holiday - Institute closed |  |

## ACADEMIC CALENDAP

## Spring Semester 2004

| January | 1 | New Year's holiday - Institute closed |  |
| :---: | :---: | :---: | :---: |
|  | 7 | Academic Standards Committee | 9:00 am |
|  | 7 | Open House (Snow date - January 8th) | 5:00-7:00 pm |
|  | 14 | New Student Orientation/Registration |  |
|  | 14 | Final Registration for returning students |  |
|  | 19 | Residence Halls open | 12:00 noon |
|  | 19 | Martin Luther King Day - Institute closed |  |
|  | 20 | Day and Evening classes begin |  |
|  | 24 | Weekend classes begin |  |
| February | 16 | Presidents' Day holiday - no day classes; evening classes meet |  |
| March | 12 | Residence Halls close | 5:00 pm |
|  | 12 | Mid-Semester Warnings |  |
|  | 12 | Last day to resolve "I" grades from Fall 2003 semester | 4:00 pm |
|  | 15-21 | Spring Break; no day, evening or weekend classes |  |
|  | 21 | Residence Halls re-open | 12:00 noon |
|  | 22 | Classes Resume | 8:00 am |
|  | 22 | Last day to drop a course or withdraw with a "W" grade |  |
|  | 22 | 60\% completion for Financial Aid requirements |  |
| April | 4 | Daylight Savings Time begins; set clocks abead 1 bour |  |
|  | 20 | Awards Day* |  |
| May | 7 | All classes end |  |
|  | 10-13 | Final Exams |  |
|  | 13 | Residence Halls close | 12:00 noon |
|  | 14 | All grades due | 12:00 noon |
|  | 18 | Academic Standards Committee* | 9:00 am |
|  | 21 | Commencement | TBA |
|  | 21 | Grades available on Student Information System |  |

## Summer Semester 2004

| May | 24 | Summer Day Division classes begin* |
| :---: | :---: | :---: |
|  | 31 | Memorial Day holiday - Institute closed |
| June | 2 | Summer Continuing Education Day Session I begins* |
|  | 2 | Summer Evening classes begin* |
|  | 21 | Radiologic Technology program begins* |
| July | 5 | Independence Day holiday - Institute closed |
|  | 12 | 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 <br> 31 College Drive <br> Concord, NH 03301-7412 <br> Telephone: (603) 271-6484 or 1-800-247-0179 

## NH COMMUNITY TECHNICAL COLLEGES AT:

Berlin/Laconia<br>2020 Riverside Drive • Berlin, NH 03570<br>Telephone: (603) 752-1113<br>379 Belmont Road • Laconia, NH 03246<br>Telephone: (603) 524-3207<br>Nashua/Claremont<br>505 Amherst Street • Nashua, NH 03063<br>Telephone: (603) 882-6923<br>or (603) 882-7022<br>1 College Drive •Claremont, NH 03743<br>Telephone: (603) 542-7744<br>Manchester/Stratham/Pease<br>1066 Front Street • Manchester, NH 03102<br>Telephone: (603) 668-6706<br>277 Portsmouth Avenue • Stratham, NH 03885<br>Telephone: (603) 772-1194<br>320 Corporate Drive • Portsmouth, NH 03801<br>Telephone: (603) 334-6306<br>NH Police Standards and Training Academy<br>17 Institute Drive • Concord, NH 03301<br>Telephone: (603) 271-2133<br>Christa McAuliffe Planetarium<br>3 Institute Drive • Concord, NH 03301<br>Telephone: (603) 271-7827

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# Thank pou to the entire Orw Oampshire Technical ©nstitute community for its cooperation, contributions and editorial assistance. 

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## DIRECTIONS TO NEW HAMPSHIIRE 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.


NHTI
Concord's Community College

## APPLICATION FOR ADMISSION

## IS YOUR APPLICATION COMPLETE? CHECK THE FOLLOWING ITEMS:

## All Applicants:

$\square$
\$10 non-refundable Application Fee enclosed (make check or money order payable to "State of NH")
$\square$
$\square$
$\square$
$\square$
$\square$
$\square$
Official high school transcript requested even if you received a GED (see NOTE below)
CEEB high school code number (verify with your high school)
$\square$
Accurate Social Security number (submit copy of Social Security card if available) (if applicable)
Copy of current, valid driver's license
Proof of Residence Form completed and signed by New Hampshire residents only
Request for New England Regional Student Program completed and signed by out-of-state New

$\square$ | England residents only |
| :--- |
| Signature of Applicant |

## Transfer Applicants:

$\square \quad$ All of the above list completed $A N D$
$\square$ Official college transcripts requested (see NOTE)

## US Permanent Residents:

$\square \quad$ Please supply proof of permanent residency status.
International Applicants please see page 6 in the Institute Catalog.

## NOTE:

It is your responsibility to request that official transcripts be mailed directly to the NHTI Admissions Office. Transcripts, non-refundable application fee, and all other documents required for selected program, must be received prior to consideration of this application.

## Send to:

Admissions Office New Hampshire Technical Institute 31 College Drive Concord, NH*03301-7412 Phone (603) 271-7134 or 1-800-247-0179

Fax: (603) 271-7139

## Excellence in Higher Education

NOTE: PLEASE TYPE OR PRINT IN INK
\$10 NON-REFUNDABLE APPLICATION FEE MADE PAYABLE TO "STATE OF NH" MUST ACCOMPANY THIS APPLICATION

Social Security Number $\qquad$ - $\qquad$ - $\qquad$

FOR OFFICE USE
Date Received Action $\qquad$
$\qquad$
Residency IS OS NERSP

NAME
Last $\qquad$ First $\qquad$ Middle $\qquad$

List other names used on school records $\qquad$

MAILINGADDRESS
Street $\qquad$ City $\qquad$ State $\qquad$ Zip $\qquad$

County of Residence

## TELEPHONENUMBERS

Home $\qquad$ - _ _ _ - __ _ _
Work $\qquad$ - - - -- __ _ _ Ext. $\qquad$

Preferred E-mail address $\qquad$

| * Male | * $\square$ Female | * Date of Birth | - - 1 |
| :---: | :---: | :---: | :---: |
|  |  | MO | DAY YR |

## *ETHNICBACKGROUND

American Indian/AlaskanAsian Pacific IsleBlack/Non-HispanicHispanic
$\square$ White/Non-Hispanic
$\square$ Non-Resident/Alien

* ANSWERING QUESTIONS SO MARKED IS OPTIONAL. THEY ARE USED FOR STATISTICAL AND COUNSELING PURPOSES. YOUR RESPONSES WILL NOT AFFECT THE ADMISSION DECISION.

| Is English your native language? $\square$ YES $\quad \square$ NO If NO, what is your native language? |  |
| :--- | :--- | :--- |
| Are you a U.S. Citizen? $\quad \square$ YES | $\square$ NO $\quad$ If NO, are you a U.S. permanent resident? $\square$ YES $\square$ NO |
| Country of Citizenship |  |

Please indicate the person who should be contacted in medical emergencies:

NAME OF: (check one) $\square$ Parent $\square$ Guardian $\square$ spouse $\square$ Other $\qquad$

Last $\qquad$ First $\qquad$

## STREETADDRESS

Street $\qquad$ City $\qquad$ State $\qquad$ Zip $\qquad$

## TELEPHONENUMBERS

$\qquad$ - $\qquad$ - $\qquad$ Work $\qquad$ - $\qquad$ - $\qquad$ Ext. $\qquad$

When do you anticipate starting your program? $\quad \mathbf{F A}=$ Fall $\quad \mathbf{S P}=$ Spring $\quad \mathbf{S U}=$ Summer $\quad$ Semester: ___ Year:
Applying to: $\square$ Day Division $\square$ Continuing Education Division (Evenings) $\square$ Full-time Part-time
Have you previously applied to NHTI?
$\square$ Yes $\square$ If yes, provide dates: $\qquad$ Have you previously attended NHTI?$\square$ No
Dates /Program: $\qquad$

Are you applying for Academic Amnesty? (see page 7 of the Institute Catalog) $\square$ Yes $\square$ No
Are you a New England resident? $\square$ Yes $\square$ No If yes, please refer to back page of application.

| Check One Program Only Business Administration | ~ ASSOCIATE DEGREE \& DIPLOMA PROGRAMS ~ |
| :---: | :---: |
| Business Administration | Education Programs Human Service |
| - Accounting | E Early Childhood Education Addiction Counseling |
| ] Hotel Administration | $\square$ Education-Associate in Arts Human Service |
| [ Management | $\square$ Education -Associate in Science $\square$ Mental Health |
| [ Marketing | Health Programs Justice/Legal Studies |
| ] Real Estate | $\square$ Dental Hygiene Criminal Justice |
| ] Sports Management | $\square$ Radiation Therapy Paralegal Studies |
| - Travel and Tourism | - Radiologic Technology Liberal Arts |
| - Computer Information Systems | $\square$ Health Science $\square$ General Studies |
| Engineering Technology | Nursing Associate in Arts (transfer program) |
| ] Architectural Engineering Technology | $\square$ ADN Days $\square$ English Option |
| - Broadband Networking \& Communications | $\square$ ADN Evenings (EADN) Liberal Arts \& Sciences Option |
| Technology | $\square$ LPN - ADN Upward Mobility Life Sciences Option |
| - Computer Engineering Technology | $\square$ Paramedic Emergency Medicine $\square$ Social/Behavioral Sciences Option |
| - Electronic Engineering Technology | $\square$ Emergency Medical Technician to $\sim$ DIPLOMA PROGRAMS $\sim$ |
| - Manufacturing Engineering Technology | Paramedic Emergency Medicine $\square$ Dental Assisting |
| - Mechanical Engineering Technology | (see catalog pages 47-48 for more information) Diagnostic Medical Sonography |

High School Last Attended
C.E.E.B. Code _ _ - _ - School Name $\qquad$ Address City $\qquad$ State $\qquad$ Zip

High School Graduation Date $\qquad$ / $\qquad$ 1 or Year G.E.D. Awarded $\qquad$ MO DAY YR College(s) Previously Attended Name $\qquad$ Name $\qquad$ AY \begin{tabular}{l|l|l}
State \& DATES ATTENDED \& DEGREE <br>
State \& <br>

- \&
\end{tabular}

Please indicate below if a member of your family is attending or has attended this Institution.
Name $\qquad$ Relationship
How did you first learn about NHTI? College Fair HS Guidance Counselor Current Student
$\square$ Family Member $\qquad$ Area Resident - Other

Do you intend to complete degree/certificate requirements at NHTI? $\square$ Yes $\square$ No If no, what are your future educational goals?

## TO BE SIGNED BY ALL APPLICANTS

The information provided by the applicant on this admission application form shall be held confidential to the extent determined by Federal law and Institute policy. New Hampshire Technical Institute reserves the right to deny admission to any applicant, who, in the judgment of Institute officials, does not qualify for admission. The Institute also reserves the right to require withdrawal of a student who does not satisfy the ideals of citizenship, character, or scholarship.

In accordance with the terms and conditions set forth in its publications, and if accepted, I agree to abide by the rules and regulations set forth in the publications and in the student handbook. I also agree that the Institute has permission to use any Institute-sponsored pictures in which any likeness appears.

I certify that I have read and agree with the above, and that all information provided herein is true and complete.
$\qquad$ Date
Signature of Parent or Legal Guardian
(if student is under 18 years old) $\qquad$

## PROOF OF RESIDENCE FORM

## IN-STATE (N.H.) APPLICANTS

 (See page 9 in catalog)You must complete one of the following statements regarding domicile. If neither is appropriate, attach a notarized statement detailing all facts upon which your claim for NH domicile is based. If you are claiming NH domicile but are not currently living in the state, be certain to explain the circumstances which require that you live elsewhere. Payment of property and/or poll taxes does not in itself constitute the basis for a claim of legal domicile. Questions may be directed to the Admissions Office. Misrepresentation of facts in order to establish a claim to New Hampshire domicile will be viewed by the Admissions Office as justification for revoking an acceptance or returning an application without consideration.

Years of Residence in N.H.

## PROOF OF RESIDENCE

If you are financially dependent on or are living with your parents, complete the following: Student's Name $\qquad$ Legal domicile $\qquad$ NH

Street

City

County

The parents of the above named applicant have been legally domiciled at the address
above for the past twelve months. The family has no other domicile.
Signature of parent $\qquad$
If you are not living with your parents and are financially independent, complete the following: Student's Name $\qquad$
Legal domicile $\qquad$ NH
Street
City
County
I have been legally domiciled at the above address for the past twelve months. I have no other domicile, am on the checklist of the town or city of domicile, and am financially independent. Signature of Student

## NEW ENGLAND REGIONAL STUDENT PROGRAM (NERSP) APPLICANTS

(See page 9 in catalog)
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 reduced rates for certain degree programs if:

- The program is not available in the home state public institutions.
- The out-of-state public institution is nearer to the student's residence than the in-state institution that offers a Signature of Student similar program.

I am applying for

## For New England residents who wish to be considered for NERSP:

I am a resident of $\qquad$
State
and request to be considered for NERSP.
$\qquad$
$\qquad$

## Statement of Nondiscrimination

New Hampshire Technical Institute does not discriminate in the administration of its admissions and educational programs, activities, or employment practice on the basis of race, color, religion, national origin, age, sex, handicap, 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; The Age Discrimination Act of 1967; Title IX of the Education Amendment of 1972; Section 504 of the Rehabilitation Act of 1973; The Americans with Disabilities Act of 1975; 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 Pamela Langley, Civil Rights/Equity Coordinator at New Hampshire Technical nstitute, 31 College Drive, Concord, NH 03301, 603-271-7150, 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 Rights, Region I, JW McCormack Post Office and Courthouse Building, Room 707, 01-0061, Boston, MA 02109-4557, 617-223-9662; the NH Commission for Human Rights, 2 Chennell Drive, Concord, NH 03301, 603-271-2767; and/or the Equal Employment Opportunity Commission, JFK Federal Building, Government Center, 4th Floor Room 475, Boston, MA 02203, 617-565-3200.


## How to Apply to NHTI

Complete the Admissions Application in this catalog, and mail or deliver to the Office of Admission or apply online via our website at www.ntti.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<br>New Hampshire Technical Institute<br>31 College Drive<br>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

## Fall Open House

Sunday, November 2, 2003

## 12 noon-3 pm

Our Admissions staff will also be hosting a variety of other events on campus and throughout the New England region. Please contact us for details.

## Statement of Nondiscrimination

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- The Age Discrimination Act of 1967;
- Title IX of the Education Amendment of 1972;
- Section 504 of the Rehabilitation Act of 1973;
- The Americans with Disabilities Act of 1975;
- Section 402 of the Vietnam Era Veteran's Readjustment Assistance Act of 1974;
- NH Law against Discrimination (RSA 354-A).

[^12]
[^0]:    * New England Regional Student Program
    ** Non-Refundable: will be credited toward first semester tuition
    *** Supports the Wellness Center and student activities (see NHTI catalog or the NHTI Student Handbook for further information)
    $\dagger 19$ meal plan; 14 meal plan available for $\$ 775 /$ semester
    $\dagger \dagger$ Resident Activity Fee
    $\dagger \dagger \dagger$ Non-refundable: will be credited to any residence hall damages

[^1]:    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.

[^2]:    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.

[^3]:    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.

[^4]:    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.

[^5]:    \# Indicates major field courses.

    * Any course with a prefix of AN, EO, HI, PS, PY or SO.
    ** Subject to the approval of the Department Head

[^6]:    \# Indicates major field courses.
    > * If not taken in Spring Semester

[^7]:    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.

[^8]:    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.

[^9]:    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.

[^10]:    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.

[^11]:    \# 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

[^12]:    Inquiries regarding discrimination may be directed to Pamela Langley, Civil Rights/Equity Coordinator at New Hampshire Technical Institute, 31 College Drive, Concord, NH 03301, 603-271-7150, 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 Rights, Region I, JW McCormack Post Office and Courthouse Building, Room 707, 01-0061, Boston, MA 02109-4557, 617-223-9662; the NH Commission for Human Rights, 2 Chennell Drive, Concord, NH 03301, 603-271-2767; and/or the Equal Employment Opportunity Commission, JFK Federal Building, Government Center, 4th Floor Room 475, Boston, MA 02203, 617-565-3200.

