NHTI- Concord's Community College Concord, New Hampshire

CHEM 115C Brewing: The Science Behind Beer

4 Credits - Spring 2020

Tracey E. Lesser Department of Natural Sciences Farnum Hall F110

Office Hours: M 2:00-3:00, T 2:00-3:00, W 8:00-9:30

R 1:00- 2:30

271-6484 Ext.4423 tlesser@ccsnh.edu



Hops +Grain+ Water + Yeast = Beer (Smithsonian Magazine)

Lecture		Laboratory	
Monday 10:00-11:20	Little 228	Monday 1200 – 1:50	Little 228/offsite
Wednesday 11:00-12:20pm	Little 228		

Catalog Description:

This course explores both the most basic and more complex chemical reactions that take place during the production of beer, as well as discussing the microbiology and how it impacts the brewing process from beginning to end. Reactions that affect each stage of the process are discussed as well as the mechanisms that are utilized to control the properties of the finished product. There is also a focus on the importance of hygiene throughout the brewing process. Please note: Students taking this class must be at least 21 years of age. A valid ID must be presented to the instructor at the first class for confirmation.

Course Objectives:

Upon completion of this course, the student will be able to:

- discuss the basic chemical reaction in the brewing process that is responsible for the production of ethanol;
- analyze the properties of water and why it is important to the brewing process;
- · identify the various strains of yeast and how they metabolize sugar and the byproduct of this reaction;
- read and interpret data tables associated with each stage of the brewing process;
- · identify the effects oxidization has on beer and the mechanisms used to control oxygen levels; and brewing process.
- · analyze the role of microorganisms in the brewing process and identify critical control points throughout the process;
- · identify and discuss the methods used by a brewer to determine if a product has been contaminated by microorganisms and the proper steps to correct the issues;
- explain and implement proper hygiene steps used throughout the brewing

Required Textbook/Software/Websites:

Palmer, John J. How to Brew: Everything you need to know to brew beer right the first time. Brewers Publications, 2006, 2017.

ISBN: 978-1-938469-35-0

www.howtobrew.com www.khanacademy.org

www.bjcp.org

Canvas will be used for journals/discussions/homework and lab reports

If this is your first time using Canvas at CCSNH, please complete the <u>Canvas student orientation</u>. This orientation offers the opportunity to familiarize you with navigating and using Canvas.

Available Technical Support

If you need help navigating this course, explore the Canvas <u>Student Guide</u>. The Student Guide, Chat, and Phone offer helpful information and are always found by clicking on the other help button on the bottom-right side of every page in Canvas.

Study and time spent outside of class:

While the actual study time needed to succeed will vary among individual students, on average students should expect to put in 3 hours of study per every hour spent in class or laboratory. Work outside of class includes but is not limited to general study, homework, library and internet research, and writing lab reports and papers.

Methods of Testing/Evaluation: The course grade will be based on the student's performance on the following:

Method of Instruction	Method of Evaluation	% of Grade
Lecture	3 Tests (Test)	25%
Lecture	Beer Tasting Journals (Project)	10%
Lecture	Home Brewing Reports/ Papers (Report/Paper)	25%
Laboratory	Lab Reports and Brew Assignments (Lab/ Brew)	25%
Lecture and Laboratory	Comprehensive Final Exam	15%

Canvas will be utilized as a gradebook. Always double check your grades based on the table above, do not rely on the computer program for grade total accuracy.

STUDENTS <u>MUST</u> OBTAIN A PASSING GRADE (ABOVE 60) IN BOTH LECTURE <u>AND</u> LAB IN ORDER TO RECEIVE A PASSING GRADE FOR THE COURSE!!!

Policy on Homework:

Homework is assigned by not formally graded. All tests are based on homework and lab assignments.

Course Grading System including letter grade/numeric equivalents:

93-100 A	83-86 B	73-76 C	63-66 D
90-92 A-	80-82 B-	70-72 C-	60-62 D-
87-89 B+	77-79 C+	67-69 D+	0-59 F

Attendance and Makeup Policy:

While occasional circumstances, over which the student has no control, may necessitate absence, the content presented in the activities missed by the student is a segment of a broad base of information being taught. For this reason, student attendance is expected.

If a student misses a lecture, it is his/her responsibility to obtain any information that was given during the absence. If a student has not had contact with an instructor for 2 consecutive weeks, he/she may be dropped from the class by the instructor. A grade of "AF" will be issued.

If school is canceled on the day of a scheduled exam or quiz, students should expect to take the exam or quiz during the next class session.

There is no make up for missed lab experiments or field trips, a grade of zero will be issued. The lowest lab grade will be dropped. Brew assignments will not be dropped. If a student receives a zero for plagiarism or cheating on a laboratory report/ problem set or is removed from the classroom for any reason that zero WILL NOT be dropped. Brewery experiences cannot be made up and will result in a grade of zero.

My job, as your professor for this class, is to facilitate the learning process and assist you in ways that will help you learn.

Classroom Deportment:

Students are expected to conduct themselves properly during all class periods. Below are some common sense rules:

- 1. Arrive on time.
- 2. If you are late the day of a quiz or exam, you will not be permitted to take that quiz or exam. This includes the final exam.
- 3. Do not leave early.
- 4. Do not leave the room during instructional periods except for an emergency. Being thirsty, wanting to make a phone call, etc... are NOT valid reasons for leaving the room.
- 5. In the laboratory, cell phones/smart watches may be used to photograph models, projected slides, etc... for study purposes only. Usage is at the discretion of the lab instructor.
- 6. Cell phones/smart watches are not permitted during quizzes and/or exams for any reason. See the testing policies below.
- 7. Use of laptops for notetaking during instructional periods is not advised. See the Scientific American article "A Learning Secret: Don't Take Notes with a Laptop" (https://www.scientificamerican.com/article/a-learning-secret-don-t-take-notes-with-a-laptop/). Students who still wish to use laptops to take notes during instructional periods must sit in the front row of the classroom.
- 8. Calculators permitted by instructors must be internet *in*capable. In other words, these calculators cannot have the ability to access the internet.
- 9. Do not sleep in class. You will be asked to leave.
- 10. Come to class prepared something to write on, something to write with, and having read the material being discussed.
- 11. Foul or intolerant language will not be permitted and could result in your removal from the course.

Testing Policies: Students are expected to abide by the NHTI Student Code of Conduct (https://www.nhti.edu/student-life/campus-safety/judicial-policies/student-code-conduct) and the policies set forth by the instructor of this course. Use of aids of any kind is NOT permitted while taking quizzes and exams. Examples of aids include, but are not limited to, textbooks, PowerPoint slides, the internet, recordings, notes, previous assignments, friends, family, etc... It is expected that the individual student registered for this course is the one and only person who takes every quiz and exam. Any student in violation of the course policies

and the Student Code of Conduct will be subject to the disciplinary sanctions outlined in the conduct document linked above.

- 1. Arrive on time.
- 2. If you are late the day of a quiz or exam, you may not be permitted to take that quiz or exam. This includes the final exam.
- 3. Once a quiz or exam begins, it must be completed in one sitting. Students must complete their quiz or exam before leaving the testing room. The restroom may be used before or after an exam and/or quiz, but never during.
- 4. All electronic devices, books, notebooks, book bags, purses and miscellaneous papers must be left at the front of the classroom. Smart watches may not be worn during quizzes or exams.
- 5. All electronic devices must be turned off. If a cell phone/smart watch goes off during a quiz or exam, a warning will be issued to the owner of the cell phone/smart watch for the first offense. A grade of zero (0) will be issued for that assessment for any subsequent disruptions.
- 6. In addition to the college policy on cheating/plagiarism, students must adhere to standards of academic integrity which prohibit sharing of, or solicitation of, specific quiz and/or exam materials.
- 7. During periods when instruction takes place following a quiz or exam, students may collect belongings after submitting their quiz or exam and wait outside the classroom until the instructor is ready to begin.
- 8. Students are responsible for bringing their own pens and pencils to quizzes and exams.
- 9. No drinks or food are allowed during any quiz or exam.
- 10. No tissues may be brought to any quiz or exam room. Tissues should be available in the room.
- 11. No ball caps, scarves, loose hooded sweatshirts or winter jackets may be worn.
- 12. Ear plugs may not be worn unless approved by the instructor or proctor. Any approved ear plugs should be of the small disposable foam type.

Any student who fails to abide by the policies above during a quiz or exam will receive a zero (0) for that quiz or exam.

Lab Expectations

- 1. Students must pass the lab portion of this course (60% min) in order to pass the course.
- 2. No lab reports will be accepted after the day of the final exam.
- 3. Safety goggles are required for each lab session and can purchased from the bookstore.
- 4. Students must wear pants and closed toe shoes, hair must be tied back.
- 5. There is no textbook for the lab portion of the class. Handouts will be used.
- 6. Students will work in groups of two while performing the experiments. Students will be required to turn in their own **unique** lab report.
- 7. Lab reports are due at the beginning of the next lab section. A late lab report will be penalized 10 points (out of 100) for each week it is late.
- 8. Lab reports MUST be turned in on Canvas and scanned or uploaded as a .docx or .pdf, email lab reports WILL NOT be accepted.
- 9. Lab reports will be graded on a scale of 1 100. One lab grade will be dropped. A grade of zero given for lab safety infractions, plagiarism or cheating will not be dropped and will be counted toward a final grade.
- 10. There are no "make-up" labs. Students must be present the day of the lab in order to turn a report in.
- 11. Lab reports must be your own work. Data and calculations may look similar to other students, but written portions must be unique and your own work. Grammar and spelling will be counted. Please refer to plagiarism and cheating policy in the Academic Affairs Notice as well as in the guidelines for writing a lab report.
- 12. Students should use the grading criteria for Chemistry Lab Reports to help write lab reports. Do not pass lab handouts in with your report; these are notes for your own use.

- 13. All safety rules must be followed. There will no "horseplay" permitted due to the potential dangers present in a chemistry lab. Any student, who is engaged in "horseplay" or violates lab rules, will not be permitted to continue the experiment and will receive a 0 for that lab.
- 14. Food and drink are not permitted while experiments are being performed.
- 15. Calculations are necessary in most labs, please come prepared with a calculator.

Course Schedule – Subject to Change- Changes will be posted in Canvas

Monday Lecture 10-11:20	Monday Lab 12-1:50		Wednesday Lecture 11-12:20
No School MLK Day		1/22	History of Brewing and
,			Fermentation
			HW History
Overview of Brewing	Lab 1: Mini Brew of	1/29	Lab 2: How to taste beer and taste
Process and Scientific	beer		buds
Method			BJCP Guidelines Project 1
Palmer: Chapters 1,4			Introduced
	BREW 1: Extract Brew at Oddball		Chemistry Math for Brewing
Lab 1 Due		2/5	Palmer: Appendix H
Palmer: Chapters 2,4, 9			Topics for paper/ presentation
			Lab 2 Due HW chemistry math
History of Brewing and	Lab 3: Specific Gravity	2/12	Barley, Malt and Enzymes
Fermentation II	and Density		Palmer: Chapters 3, 15
HW History	Palmer: Appendix A		HW Barley, Malt
Paper topic chosen	BREW 1 Due		Tive Barrey, Mair
No School Presidents Day	J. (2)	2/19	TEST 1
Report 1 and Report 2: Brev	v at home dav	_,	Outline of paper Due
Palmer: Chapter 25	Lab 3 Due		Camillo di papor 2 de
Sugar and Organic	Lab 4: Tollen's and	2/26	Mash and Wort Production
Molecules	other sugar tests	2,20	Palmer: Chapters 16, 17, 18, 19
HW organic molecules and	Louis Pasteur		HW Mash and Wort
sugar Homebrew Log	200.01.00.00.		The mach and their
due			
Brew 2: Bottling and recipe	design at Oddball	3/4	Brew 2: Recipe Design Lab
Palmer: Chapters 10, 12,13			Rough Draft of Paper with Writing
Lab 4 due	,		Center slip due
Brew 3: Brewing an all grain	recipe at Oddball	3/11	Mash and Wort Production
Palmer: Chapter 20		07	Palmer: Chapters 16,17, 18, 19
Brew 2 Due			HW Mash and Wort
TEST 2	Lab 5: Mashing with	3/5	Hops, Preservation, Pasteurization
Brew 1 Fixed Label due	lodimetry Brew 3	J. 5	Palmer: Chapter 5
	Due		
Hops, Preservation,	Lab 6: Glucose and	4/1	Yeast
Pasteurization	Fermentation		Palmer: Chapters 7,13,14
Palmer: Chapter 5	Lab 5 Due		Brew 2 Due
Fermentation	Lab 7:	4/8	Fermentation 2
Palmer: Chapter 6	Hemocytometers/	., 0	Palmer: Chapter 6
	Plating our mini brew		
	Lab 6 Due		
Presentations	Lab 8: Examining our	4/15	Test 3
	plates/Label making	., 10	. 33. 3
	platoo, Easor making		

Lab 7 Due		
Brew 4: Brewery Tour TBD	4/22	Water Chemistry
Lab 8 Due		Final Paper Due
Report 1 and Report 2 Due		
Brew 6: Tasting and Judging	4/29	Clarity, Packaging, Priming and
Brew 4 Due		Bottling
Project 1 Due		Palmer: Chapter 10 Appendix C
Effects of Yeast on beer	5/8	Final Exam
		Brew 5 Due

NHTI ACADEMIC AFFAIRS NOTICES For inclusion with all course syllabi

Students must meet the requirements of all academic policies. Therefore, students are expected to acquaint themselves with these policies by visiting the college's Web site at: http://www.nhti.edu/academics/requirements-policies.

COURSE DROP/WITHDRAWAL AND REFUND

A full semester course must be dropped by notifying the Registrar's Office or the Academic Advising Center prior to the end of the fourteenth calendar day of the semester in order to receive a 100% refund of tuition, less non-refundable fees. After that time, the student may submit a DROP form to the Registrar's Office or Advising Center but no refund will be granted. Ceasing to attend a class does not constitute an official drop or withdrawal and may result in a failing grade. 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 grade of "WP" or "WF" will be issued depending on the student's standing at the time of the drop. Note: Dates are prorated for courses offered in an alternative format; contact the Registrar or Advising Center for details. Classes that run for less than the full semester have 7 calendar days from the start of the alternative semester to drop with a full refund. See policy at: <a href="https://www.nhti.edu/academics/requirements-policies/dropping-classeswithdrawing-nhti} Dates for the spring 2020 full semester are as follows:

Last day to drop with a full refund for full semester courses
Last day to withdraw with a grade of "W' from full semester courses

Spring 2020 2/3/2020 3/30/2020

CLASSROOM ETIQUETTE

Academic integrity is of primary importance in the classroom, whether the classroom be face-to-face or online. Both students and faculty are responsible for creating and maintaining an environment that supports an effective learning community. It is therefore imperative that students and faculty demonstrate mutual respect. Inappropriate behavior may compromise the learning and performance of all students. Such inappropriate behaviors include, but are not limited to: late arrivals/early departures; loud or prolonged side conversations; use of cell phones; computers (other than for legitimate academic use); iPods (or similar devices), etc.; use of derogatory or vulgar language. All students are expected to abide by the Student Code of Conduct (https://www.nhti.edu/student-life/campus-safety/student-code-conduct-and-judicial-process) as published in the <a href="https://www.nhti.edu/student-life/campus-safety/student-life/campus-safety/student-life/campus-safety/student-life/campus-safety/student-life/campus-safety/student-life/campus-safety/student-life/campus-safety/student-life/campus-safety/student-life/campus-safety/student-life/campus-safety/student-life/campus-safety/student-life/campus-safety/student-life/campus-safety/student-life/ca

CLASSROOM SAFETY AND EMERGENCY PROTOCOLS

NHTI- Concord's Community College values the safety of is community members and guests. To report suspicious activity or if you are need of assistance contact the NHTI Campus Safety Department: Monday through Friday from 8am to 4pm at (603) 230-4042, after hours and on weekends on the Emergency Line at (603) 224-3287. You also may report non-emergency information using the following link https://www.nhti.edu/student-life/campus-safety/report-incident-campus-safety If it is an emergency that requires police, fire or medical response contact 911 first, then contact the NHTI Campus Safety Department.

Emergency information will be provided to the College Community via email, phone and text through the NHTI Alerts program RAVE. Ensure your information is current in RAVE by going to https://www.nhti.edu/student-life/campus-safety/nhti-alerts and logging on.

NHTI Campus Safety Department provides its Annual Security Report and information on Campus Policies, Emergency Response and Crime Prevention on its page on the NHTI Website at https://www.nhti.edu/student-life/campus-safety

To aid in emergency response situations all NHTI classrooms and offices have fire evacuation plans posted by the door and emergency cards at teacher stations. Emergency cards contain emergency response information along with first aid box/AED locations throughout campus. Please familiarize yourself with these items and if you have any questions or concerns please don't hesitate to contact the NHTI Campus Safety Department at <a href="mailto:nthicken

PROCESS TO ADDRESS A CLASSROOM CONCERN

NHTI is committed to creating and maintaining a positive and productive learning environment for all students. Students who have concerns about any aspect of the classroom experience should first discuss the concern with the course instructor. Discussions may be held in person, via telephone, or CCSNH email system. In the event that discussion with the course instructor does not resolve the issue, the concern should then be brought to the appropriate department chair (https://www.nhti.edu/community-visitors/campus-directory/academic-department-heads-listing). Only after a student has been unable to resolve the issue through discussion with their course instructor and department chair should a student bring concerns to the Vice President of Academic Affairs.

Where the concern about the classroom experience involves discrimination on the basis of unlawful criteria including race, color, religion, national or ethnic origin, age, sex, sexual orientation, marital status, disability, gender identify or expression, genetic information, and veteran status, as defined under applicable law, the student should also report the conduct to the college's Title IX and Equity Coordinator, and follow the process set for in Student Affairs Policy 730.06 https://www.nhti.edu/student-life/campus-safety/student-code-conduct-and-judicial-process#student_grievance and where the concern involves a grade appeal the student must follow the process and timeline outlined in Academic Affairs Policy, https://www.nhti.edu/academics/requirements-policies/grading-system#gradeappeal.

CIVIL RIGHTS and EQUITY ISSUES (discrimination and harassment)

REPORTING SEXUAL MISCONDUCT, VIOLENCE, OR EXPLOITATION

At NHTI, Concord's Community College, every attempt is made to create and maintain a safe learning environment in which students feel able to share opinions and related life experiences in classroom discussions, in your written work, and in meetings with your professors. To the greatest extent possible, this information will be kept private. However, staff and faculty have a legal obligation to report information concerning sexual misconduct, violence, and exploitation of individuals per federal statute and in compliance with established policies and procedures at NHTI Concord's Community College. If you have been subjected to sexual misconduct, violence or exploitation, we encourage you to contact the NHTI Title IX and Equity Coordinator, Laura Pantano, Student Center 229 lpantano@ccsnh.edu 603.271.6484 extension 4128. You may also contact: Crisis Center of Central New Hampshire at Telephone: 866.841.6229 (crisis line). You are not alone.

Additional information including resources can be found at:

New Hampshire Coalition Against Domestic and Sexual Violence: https://www.nhcadsv.org/
uSafe (Add NHTI specific uSafe link): http://www.usafenh.org

THE ACADEMIC CENTER FOR EXCELLENCE

The Academic Center for Excellence (ACE), located in the library, provides free academic assistance to all NHTI students who would like to improve their grades. The ACE offers peer and professional tutoring in Accounting, A&P, Biological Sciences, Math, Chemistry, Physics and most other subjects. The Writing Center & Study Solutions Lab offers writing, reading and study skills. The Academic Center for Excellence also includes Accessibility Services and a computer lab. For more information call 230-4027 or visit https://www.nhti.edu/student-resources/get-help-your-studies.

In compliance with Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1991, students with disabilities are eligible to receive academic adjustments and services to ensure equal access to classes and programs. Students with disabilities are encouraged to contact the Coordinator of Accessibility Services as soon as possible for a confidential discussion regarding their learning needs and the process for requesting reasonable accommodations in the classroom. Once the Office of Accessibility Services has approved services, the student must show the Letter of Accommodation to their instructor. Accommodations are not provided retroactively. The Office of Accessibility Services is located in the Academic Center for Excellence or by email at NHTIAccessibilityServices@ccsnh.edu.

CCSNH CLASSROOM RECORDING POLICY

As per CCSNH policy: "Students are not permitted to record any class lectures, activities or discussion using electronic video, still photo, or audio recording unless the student first obtains permission from the instructor. If the recording is made as a recommended, reasonable accommodation or modification for a student with a disability, permission shall not be unreasonably withheld." To view the entire policy please visit: https://www.ccsnh.edu/wp-content/uploads/2019/09/System-Policies-600-Academic-12-05-18.docx.pdf (starting on page 37).

CROSS-CULTURAL EDUCATION & ENGLISH for SPEAKERS of OTHER LANGUAGES (ESOL)

The cross-cultural education department is located in the Library, 130. The department works to provide the tools, strategies, and materials necessary for second language/second culture students and their instructors to access and deliver academic content, respectively. Services also include advising, and support in acculturating to college and community life. Prospective students may test to allow for appropriate academic recommendations and course placement and registration. ESOL courses are offered for college credit throughout the year. An academic transition process allows students to take ESOL courses and courses required in their chosen program simultaneously. One-on-one and open group tutoring can be arranged. Programs that assist members of the international, immigrant, and host communities are also offered to better support cross-cultural communication and to promote awareness and understanding of and appreciation for the growing diversity of our community. Call 230-4055 for more information, or stop by. We are happy to help!

PLAGIARISM/CHEATING POLICY

As stated in the Student Handbook: Honesty is expected of all NHTI students. In academic matters this includes the submission of work that clearly indicates its source. Dishonest acts include cheating and plagiarism. *Cheating* includes, but is not limited to: (1) use of any unauthorized assistance from other persons or technologies in taking quizzes, tests, or examinations or in the preparation and completion of class assignments; (2) dependence upon the aid of resources beyond those authorized by the instructor in writing papers, preparing reports, solving problems, or carrying out other assignments; (3) the acquisition, without permission, of tests or other academic material belonging to a member of the CCSNH colleges faculty, staff, or students; or (4) knowingly providing unauthorized assistance of any kind to another for the purpose of providing unfair advantage to the recipient in the completion of course assessments/assignments (sometimes known as *facilitation*). *Plagiarism* includes, but is not limited to, the use (intentional or unintentional), by paraphrase or direct quotation, of the published or unpublished work of another person without full and clear acknowledgment. It also includes the unacknowledged use of materials prepared by another person or agency engaged in providing term papers or other academic materials via direct sale, barter, or other means. Cheating and plagiarism are considered serious disciplinary matters and are subject to the same penalties and procedures as other NHTI disciplinary matters. Students should be aware that penalties levied in proven cases of cheating or plagiarism may include the issuance of a grade of AF (which may in turn lead to delay of graduation), suspension or dismissal from a program or from the college, or other sanctions as deemed appropriate

CANCELLATION/DELAYED START OF CLASSES

When the President deems it prudent to cancel all classes at the college, students will receive a notice via their college email address using the NHTI Alerts Notification System. (To receive Alerts messages via other addresses/phone numbers, sign up at www.nhti.edu.) An announcement will also be made on WMUR-TV (Channel 9) and local radio stations and will be posted to the NHTI Web site. Students checking the Web page for cancellation announcements should be aware that the page must be repeatedly "refreshed" to obtain the latest information. Occasionally, the President will opt for a delayed start to classes. This means that students should be prepared to begin their school day with whatever activity they would normally be doing at the announced opening time. For example, if a two-hour delay is announced, and a student is scheduled for a class that normally meets from 8:00-10:50 AM, the student should come to that class at 10:00 AM for the remaining 50 minutes of class; classes that are normally completed before 10:00 AM would be cancelled.

GRADE REPORTING

Faculty submit grades electronically to the Registrar's Office within a few days following the end of each final exam period. FINAL GRADES ARE <u>NOT</u> MAILED to students. It is the student's responsibility to review his/her final grades via the Student Information System as soon as grades are available. Students who receive an "I" (Incomplete) grade should coordinate with the instructor to complete the remaining coursework as soon as possible. Unresolved "I" grades will convert to an "F" (Failing) grade automatically at the end of the third week of the following semester. A grade of Incomplete will place a student's financial aid status on hold for the subsequent semester. Consult the NHTI catalog for the full "Incomplete Grade Policy."

STUDENT ATHLETES

NHTI values its student athletes and wants them to be successful both on the field/court and off. Therefore, student athletes participating on any NHTI-sponsored team MUST provide each of their instructors with documentation from the NHTI Athletic Department confirming their participation on a team, as well as the schedule of practices and games, within the first week of the semester or immediately upon joining a team (if joining after the semester begins) to receive consideration for excused absences, make-up testing, or other sorts of accommodations related to the team schedule. This documentation must be presented in advance of any special requests. Participation on an NHTI-sponsored team does not excuse any student from compliance with any/all course requirements. Faculty are not required to excuse students from class or lab to attend practice sessions, and there may be circumstances (such as clinical requirements) under which athletes may not be excused for games, though every effort will be made to accommodate the schedules of student athletes who work responsibly with their instructors.

STUDENT EMAIL

Official Community College System of New Hampshire (CCSNH) email accounts will be created automatically for all enrolled students at the time of course registration. This is the only email address that will be recognized by NHTI for any required correspondence in NHTI-controlled courses and will serve as the official account for ALL of your electronic communication with the college. This practice will ensure that all students are able to comply with the email-based requirements specified by faculty. Students are responsible for checking their official student email regularly and reading college-related communications. The electronic mail system is college property. Additionally, all messages composed, sent, or received on the electronic mail system are and remain the property of CCSNH or NHTI. The CCSNH electronic mail system is not to be used to create or forward any offensive messages. CCSNH is not responsible for the handling of email by outside vendors.

ACADEMIC CREDIT

NHTI awards academic credit in accordance with the policy of the Community College System of New Hampshire, which equates a credit hour to (1) one hour* of "lecture" per week for 15-16 weeks**; (2) 2-3 hours of lab per week for 15-16 weeks**; (3) 3 hours of practicum per week for 15-16 weeks**; (4) 3-6 internship hours per week for 15-16 weeks**; or (5) 3-5 clinical hours per week for 15-16 weeks**. In awarding academic credit, NHTI faculty create instructional plans, activities, and assessments with the expectation that students will spend a minimum of 2-3 hours outside of class per week per credit (**) in related course activities (completing assignments, studying, etc.).

*one instructional hour equals 50 minutes

** All "per week" hours should be prorated accordingly for alternative-length semesters. For example, a course that meets for 3 hours per week in a 16-week semester and requires 6-9 hours per week of additional work outside the classroom would meet for 6 hours per week and require 12-18 hours per week of additional study time when offered in an 8-week format.