



Hybrid Course Syllabus
Process Technology: I Equipment
CHEM 117 (4 Credit Hour)
Spring 2022

Instructor: Dr. Gholam R. Ehteshami

Office: TECH312

Office Hours: by schedules, ref to Contact Policy below

Class Location: TECH312, Blackboard, Zoom

Class Meeting Times: TTH 8:00 am to 9:20 am

Contact Information:

E-mail: gehteshami@navajotech.edu

Email Message via Blackboard

(Office) 505/786-4163

(Cellular) 480/309-3689

Class Format: This is a hybrid or online class.

Required Tools: Students need laptop computer and Internet. Students who don't have laptops, the cost of the laptops will be deducted from their Pell grant and then NTU will purchase laptops for them.

Required Materials:

Textbook: Process Technology Equipment and Systems, 4th Edition, Charles E. Thomas

ISBN: ISBN-10: 1285444582, ISBN-13: 9781285444581

Tools: TBD

Lab Fee: TBD

Mission Statement

Navajo Technical University's mission is to provide college readiness programs, certificates, associate, baccalaureate, and graduate degrees. Students, faculty, and staff will provide value to the Diné community through research, community engagement, service learning, and activities designed to foster cultural and environmental preservation and sustainable economic development. The University is committed to a high quality, student-oriented, hands-on-learning environment based on the Diné cultural principles: *Nitsáhákees, Nahátá, Íina, Sihasin.*

Course Description:

A chemical laboratory equipment course that introduces the student to different laboratory equipment and techniques they will use later in the curriculum. Teaches the student about how to use the lab equipment safely and effectively. Topics include, glass wares, PH meters, balances, making solutions, building apparatuses and exposure to all of the standard and commonly used chemical laboratory equipment.

Course Objectives

After successfully completing this course:

1. To introduce students to different laboratory equipment and techniques.
2. To teach students about how to use the lab equipment safely and effectively.
3. To provide students with hands on lab equipment and learn how use them for different applications.

Course Activities

Week	Date	Class Topics/Reading Due	Assignments Due	Assessments
1	1/19-22		Pretest	
	1/22/2021	Last day to add/drop		
2	1/25-29			TBD
3	2/1-5			
4	2/8-12			
5	2/15-19			TBD
6	2/22-26			
	2/26/2021	Graduation Petition due		
7	3/1-5			TBD
8	3/8-12	Midterm Review and Midterm	Midterm	
	3/12/2021	Midterm grades due		
	3/15-19	SPRING BREAK		TBD
9	3/22-26			
10	3/29-4/2			
	4/1/2021	Last day to withdraw with "W"		TBD
11	4/5-9			
12	4/12-16			
13	4/19-23			TBD
14	4/26-30			
15	5/3-7	Project Presentations		
16	5/10-13		Finals	
	5/13/2021	Grades due to the Registrar		
	5/14/2021	Graduation		

COURSE OUTCOMES	COURSE MEASUREMENTS
Students will be able to demonstrate a broad range of basic lab equipment skills applicable to chemistry and chemical industries.	Complete reading assignments, homework assignments, exams, projects, quizzes, and laboratory (hands-on learning).
Students will be able to demonstrate knowledge of technology and laboratory instrumentation.	
Students will be able to use basic instrumentation such as a pH meter and spectrophotometer,	
Students will be able to operate/use basic lab glassware, Bunsen burner, distilled water supply	

Grading Plan:

90-100 = A

80-89 = B

70-79 = C

60-69 = D

0-59 = F

Course Policies

Grading Policy

Each student must do his or her own homework and case studies. Discussion among students on homework and cases is encouraged for clarification of assignments, technical details of using software, and structuring major steps of solutions - especially on the course's website. Students must do their own work on the homework and exam. Cheating and Plagiarism are strictly forbidden. Cheating includes but is not limited to: plagiarism, submission of work that is not the student's own, submission or use of falsified data, unauthorized access to exam or assignment, use of unauthorized material during an exam, supplying or communicating unauthorized information for an assignment or exam.

Federal Compliances-Credit Hours Allocation: 2:1, 3:1, and 4:1 Rules

- A. For every credit hours spent in class, a student is expected to spend two (2) hours outside of class studying the Course materials.
- B. For a hybrid or blended course of one (1) credit hour, a student is expected to spend three (3) hours per week studying the course materials.
- C. For online courses of one (1) credit hour, a student is expected to spend four (4) hours per week studying the course materials.

Participation

Students are expected to attend and participate in all class activities- as listed above, as it is 5% of the grade. Points will be given to students who actively participate in class activities including field trips, laboratories, and ask questions of guest speakers and other presenters.

Cell phone and headphone use

Please turn cell phones off or place them on silence or vibrate mode **BEFORE** coming to class. Also, answer cell phones **OUTSIDE OF CLASS** (not in the classroom). Exercising cell phone use courtesy is appreciated by both the instructor and classmates. Headphones are to be removed before coming to class.

Attendance Policy

Students are expected to regularly attend all classes for which they are registered. A percentage of the student's grade will be based on class attendance and participation. Absence from class, regardless of the reason, does not relieve the student of his/her responsibility to complete all course work by the required deadlines. Furthermore, it is the student's responsibility to obtain notes, handouts, and any other information covered when absent from class and to arrange to make up any in-class assignments or tests if permitted by the instructor. Incomplete or missing assignments will necessarily affect the student's grades. Instructors will report excessive and/or unexplained absences to the academic counselor for investigation and potential intervention. Instructors may drop students from the class after 3 absences unless prior arrangements are made with the instructor to make up work and the instructor deems any excuse acceptable.

Academic Integrity

Integrity (honesty) is expected of every student in all academic work. The guiding principle of academic integrity is that a student's submitted work must be the student's own. Students who engage in academic dishonesty diminish their education and bring discredit to the college community. Avoid situations likely to compromise academic integrity such as: cheating, facilitating academic dishonesty, and plagiarism; modifying academic work to obtain additional credit in the same class unless approved in advance by the instructor, failure to observe rules of academic integrity established by the instructor.

Diné Philosophy of Education

The Diné Philosophy of Education (DPE) is incorporated into every class for students to become aware of and to understand the significance of the four Diné philosophical elements, including its affiliation with the four directions, four sacred mountains, the four set of thought processes and so forth: Nitsáhákees, Nahát'á, Íina and Siih Hasin which are essential and relevant to self-identity, respect and wisdom to achieve career goals successfully.

Students with Disabilities

The Navajo Technical College and the General Science program are committed to serving all enrolled students in a non-discriminatory and accommodating manner. Any student who feels he/she may need an accommodation based on the impact of disability, or needs special accommodations should inform the instructor privately of such so that accommodations arrangement can be made. Students who need an accommodation should also contact the Special Needs Counselor, Malcolm McKerry, whose phone number is 505-786-4138.