



Course Syllabus

Course #: CHM1025 **Course Name:** Intro to Org & Bio Chem Lab

Division: A&S

Class Days:

Class Time:

Location: Classroom:

Laboratory:

Credit Hours: 1

Contact Hours: 2

Lab Hours: 2 **Lecture Hours:** 0

Instructor:

Office Location:

Phone:

Email Address:

Office Hours:

Division Office/Location: A-202

Division Fax:

Full-time Contact Person: Nancy Sattler, Ph.D.

Phone(s): 419.559.2179

Course Description:

The laboratory experiments review and reinforce the theoretical aspects of the lecture topics presented in CHM 1020, Intro to Org & Bio Chemistry. (Fall, Spring)

Prerequisite(s):

Corequisite(s): CHM 1020

Entry Level Skills and Knowledge:

Required Texts, Supplies and Equipment:

TEXTS: Exploring Chemistry Laboratory Experiments in General, Organic, and Biological Chemistry, 2/E, Julie Peller, 2003, Prentice Hall.

SUPPLIES: Scientific calculator, capable of scientific notation and logarithms.

Periodic Table (laminated copies available in bookstore)

Grading:

13 Pre-labs @ 5 pts	95 pts
13 Post-labs @ 20 pts	260
1 Lab Exam @ 40 pts each	50
Participation @ 35 pts	45
TOTAL	450 pts

Grading Scale:	90 - 100% of total points	405 to 450 =	A
	80 - 89%	360 to 404 =	B
	70 - 79%	315 to 359 =	C
	60 - 69%	270 to 314 =	D
	<60%	≤ 269 =	F

Learning Outcomes:

General Education

1. Evaluate arguments in a logical fashion.
2. Employ the methods of inquiry characteristic of natural sciences, social sciences, mathematics, and the arts and humanities.

Specific course objectives include:

1. The student will become familiar with safe organic and biological chemistry laboratory procedures.
2. The student will be able to recognize basic laboratory equipment.
3. The student will understand how to classify organic and biological chemicals according to their physical properties.
4. The student will investigate the chemical and physical properties of several families of organic and biological chemicals.
5. The student will observe many of the practical applications of the theory presented in CHM 1020 "Intro to Org & Bio Chem."

Technical Education

Assessment of Student Learning:

This course may include a project that is one of several that will be used by faculty to assess student academic performance in the program. A panel of faculty will review all (projects or whatever assessment activity you are doing), then assess and summarize the academic performance of students at this point in the program. The results of this assessment will be shared among the department faculty, used to identify needed changes or improvements, and submitted to the Student Academic Assessment Committee as part of the college's overall student academic assessment effort.

Assessment Project and Measurement in course (if any):

Plan of Work:

Wk 1:	Lab 17	"Laboratory Safety in the Organic Lab"
Wk 2:	Lab 18	"Hydrocarbons"
Wk 3:	No Lab	"Make-Up"
Wk 4:	Lab 19	"Reactivity of Hydrocarbons"
Wk 5:	Lab 20	"Physical Properties of Organic Compounds"
Wk 6:	Lab 23	"Alcohols and Phenols"
Wk 7:	Lab 24	"Aldehydes, Ketones, and Carboxylic Acids"
Wk 8:	Lab 26	"Synthesis of Aspirin"
Wk 9:	Lab 27	"Amino Acids and Proteins"
Wk 10:	Lab 29	"Enzymes"
Wk 11:	Lab 30	"Carbohydrates"
Wk 12:	Lab 31	"Soaps and Detergents"
Wk 13:	Lab 32	"Analysis of Fats in the Diet"
Wk 14:	No Lab	"Make-Up"
Wk 15:	Lab 34	"Natural Versus Synthetic Food Coloring"
Wk 16:	Review & Lab Clean-Up	
Wk 17:		

Final Exam

Policies

Course Withdrawing: If for any reason you need to withdraw from this course, be certain that you do so according to College procedure. It is your responsibility to know and follow this procedure. If you simply stop coming to class, without officially withdrawing from the course, your grade is an automatic “F.” Please follow official College procedure for withdrawing from this or any course.

College Academic Policies are located in the College Catalog. A copy of the current catalog may be picked up in any of the division offices or admissions. The list of college policies is also available online at <https://www.terra.edu/register/Collegecat/policies.asp>.

Support Services: The College offers a number of support services to assist in your success in this course and all courses. Among these services are the Writing & Math Center in B105, the Office of Learning Support Services, which coordinates the campus disability services and tutoring programs, the computer labs, and the computers in the atriums.

Any student who feels he/she may need an accommodation based on the documentation of a disability should contact the Office of Learning Support Services privately to discuss his/her specific issues. Please contact the OLSS at (419) 334-8400 X 208 or visit 100 Roy Klay Hall (Building A) to coordinate reasonable accommodations.

If you have a documented disability and are receiving academic accommodations through the Office of Learning Support Services, please schedule a meeting with your instructor in a timely manner so that we may discuss how these services will be arranged.

Tutoring services are available to students beginning the second week of every quarter. Students requesting tutoring services should obtain a tutor request form from the OLSS in 100 Roy Klay Hall (Building A) or online at the Terra website. Please note that instructor verification and acceptance of the Student Learner Agreement is necessary for all tutoring requests. All requests should be submitted to 100 Roy Klay Hall (Building A).