

CHEM 112
Introductory Organic and Biological
Chemistry Laboratory
Syllabus - Spring 2012



Instructors: Kim L. Pamplin, Ph.D. Steven Martinez
Foster Science 256 sam10a@acu.edu
674-2001 Sara Touchton
pamplink@acu.edu sbt09b@acu.edu

Office Hours: MWF 8:30-11

Lab Manual: General, Organic & Biological Chemistry, Timberlake (2007). Benjamin Cummings

Mission of Abilene Christian University:

The mission of Abilene Christian University is to educate its students for Christian service and leadership throughout the world.

Basis for Grade:

Pre-lab quizzes (one per week)	20%
Lab Reports/post-lab questions	60%
Final Exam	20%

Grading Scale:

90.00-100	A
80.00-89.99	B
70.00-79.99	C
60.00-69.99	D
Below 60	F

Grades between 10 and 100 are considered to have four significant figures, meaning that if rounding is necessary, it will occur in the hundredths place. A grade of 89.994 rounds down to 89.99 and is a B. A grade of 79.995 rounds to 80.00 and is a B.

Course Description:

Continuation of CHEM 111. Activities coordinate with topics discussed in CHEM 114. Study of calorimetry; chemistry of organic compounds and functional groups. Prerequisites: CHEM 111; CHEM 114 or concurrent enrollment. Not for majors in the Department of Chemistry and Biochemistry.

Attendance: Attendance will be checked by the TA each class period. Students who miss three (3) lab periods may be dropped from the lab by the professor. If a student has an excused absence, then the student should inform the instructor immediately and may make up the missed lab on April 30.

Grading Policy:

Pre-lab quizzes will be given each week at the beginning of lab and will last approximately 10-15 minutes. The tests will cover the laboratory procedures and experiment to be performed on that day. The lowest test grade and lab report grade will be dropped at the end of the semester. The lab report and questions must be turned in at the end of the lab period. **Late reports will not be accepted.** In order to avoid a ten (10) point reduction in the lab report grade, the workbench must be clean at the end of the lab period.

NO EXTRA CREDIT WILL BE GIVEN!

Laboratory Schedule:

Date	Experiment Number	Description
January 23		Lab safety and station assignment.
	Experiment 21	Properties of Organic Compounds
January 30	Experiment 22	Structures of Alkanes
February 7	Experiment 23	Reactions of Hydrocarbons
February 14	Experiment 24	Alcohols and Phenols
February 21	Experiment 25	Aldehydes and Ketones
February 28	Experiment 26	Types of Carbohydrates
March 5	Experiment 28	Carboxylic Acids and Esters
March 12	No Lab	No Lab
March 19	Experiment 30	Lipids
March 26	Experiment 32	Saponification and Soaps
April 2	Experiment 33	Amines and Amides
April 9	Experiment 34	Synthesis of Acetaminophen
April 16	Experiment 36	Amino Acids
April 23		Cumulative Final Examination
April 30		Make-up Lab (if needed)

Laboratory Dress Code!

The ACU Dress Code will be strictly enforced. In addition, for safety, the following rules will be enforced unless noted by the instructor.

No-open toe shoes.

No shorts.

No contact lenses.

Eye protection must be worn at all times while in the laboratory. At the discretion of the instructor or the teaching assistant, students may be dismissed from the laboratory and/or their grade for that experiment may be reduced beginning with the first violation.