

Organic Chemistry I
CHE303 (3 hours credit)

Syllabus

Professor: Dr. Trent Selby

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Office Hours: Mon., Tues., Wed. & Thurs. 10:00-11:30
(or by appointment)

Class: Lecture (required attendance)

Textbook: (required) "Organic Chemistry," 10th Ed., Solomons & Fryhle (Wiley)
(optional) 1. "Study Guide and Solutions Manual for Organic Chemistry, 10th Edition," T. W. Graham Solomons.
2. A molecular models kit for organic chemistry

Prerequisites: Chemistry 141 and Chemistry 142

Co-requisite: Chemistry 313. Students must either be taking CHE 313 or already have credit for it.

Attendance Policy: Regular attendance at all lectures is expected. Students with excessive absences may be dropped from the course for lack of attendance. If a regular class meeting is missed, it is the student's responsibility to obtain any assignments or instructions that were given.

Exams :

Exam 1 (100 pts):

Exam 2 (100 pts):

Exam 3 (100 pts):

Exam 4 (100 pts):

Comprehensive Final (140 pts):

Any grading issues must be resolved within one week from the day the exam is passed back to the class. After this time, I will no longer discuss a grading issue for that exam.

*Makeup tests will be given only in case of excused absences. You can take an exam early if you make arrangements with me and if you have a good reason.

Grading:

Course Grades

		A = 396
Three best hour exams	= 300 pts.	B = 352
Final Exam	= <u>140 pts.</u>	C = 308
Maximum possible points	= 440 pts.	D = 264

Academic Integrity: Mississippi College students are expected to be completely honest in all aspects of the course. Dishonesty, such as cheating or plagiarism, will not be tolerated and will be dealt with according to the stated policies of the university. For details, see the current *Mississippi College Undergraduate Catalog*, the *Tomahawk*, and Policy 2.19.

Course description: This course includes a study of the fundamental types of organic compounds, their structure, nomenclature, classification, synthesis, typical reactions, and reaction mechanisms.

Rationale: This course will provide a fundamental understanding of organic chemical compounds and principles and how they are involved in everyday life as well as in advanced chemical studies, biochemistry, and medicine on a molecular level.

Student Objectives: The objectives of this course are to provide the student with the necessary knowledge and experience to be able to:

1. understand structural theory as it relates to organic compounds.
2. relate structure and nomenclature of compounds.
3. predict shapes of molecules, physical properties, and chemical properties of compounds when given the formulas of compounds.
4. visualize the three dimensional structure of molecules and relate it to stereochemistry.
5. predict the type of mechanism involved from the nature of the reactants and reaction conditions.
6. understand the mechanism and stereochemistry of alkane halogenation, nucleophilic substitution, elimination, and addition reactions.
7. relate the study of organic chemistry to biochemistry, medicine, and environmental studies.

Methods of Instruction: Classes will consist primarily of lecture and problem solving. The text will be followed as far as the general topics, but current material, especially relating to biochemical and medical aspects, will be added from other sources.

Students with disabilities: *This department believes in reasonably accommodating individuals with disabilities and complies with university policy established under Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act (1990) to provide for equal access and opportunity. Please communicate with your professor as to your specific needs so appropriate arrangements can be made through the department.*