

1st Semester Organic Lecture Syllabus - CHEM 3510

- Chemistry 3510 - Organic Chemistry (3 credit hours lecture + 1 hour lab)
Semester: Fall 2009
Dates: August 31 (Monday) - December 17 (Thursday)
- Instructor - Dr. F. J. Matthews
Office - SSC D304
Office phone - 931-221-7622
Chemistry office phone - 931-221-7626
Office hours - [office hours](#) or see office door
E-mail address - matthewsf@apsu.edu
- Course Description:
CHEM 3510 (lecture) and CHEM 3511 (lab) represent a single course and must be taken concurrently. A course grade, determined using 75% lecture grade and 25% lab grade, will be assigned at the end of the semester. Students who choose to repeat organic lecture or lab will be required to repeat both as they represent corequisites.
- Lecture Course Description:
Study of functional groups (alkanes, alkenes, alkynes, alkyl halides, aromatic compounds) and their reactions, structure determination, stereochemistry, and spectroscopy.
- Prerequisite: CH1120 or (1020 and 1840)
Co-requisite: [CH3511](#)
- Lecture Time: 10:10-11:05 am / 1:25-2:20 pm MWF - SSC E305
- Lecture Texts:
McMurry, John "Organic Chemistry", 7th edition; Brooks/Cole Publishing Co.: Belmont CA, 2008.
McMurry, Susan "Study Guide and Solutions Manual for McMurry's Organic Chemistry", 7th edition; Brooks/Cole Publishing Co.: Belmont CA, 2008.
- Other Required Materials:
Students need to purchase a hole punch (or three-hole punch) and a stapler for assignments to be turned into the instructor for grading. In addition, students are encouraged to purchase a set of molecular models from the bookstore. These are invaluable for studying stereochemistry (Chapters 4 and 9) and will be useful through the entire course of organic chemistry.
- Objectives:
 - (1) To introduce the student to organic chemistry, including nomenclature, reactions, mechanisms, stereochemistry, and spectroscopy.
 - (2) To provide the student with a firm foundation in organic chemistry such that the student may pursue other areas of science.
 - (3) To help the student develop the necessary study habits which will be required for advanced educational opportunities.
- Topics to be Covered:
The first sixteen (16) chapters of McMurry's "Organic Chemistry" may be covered. This is approximately one-half of the text which includes the study of alkanes, alkenes, alkynes, alicyclic and aromatic hydrocarbons, dienes, alkyl halides, stereochemistry, and organic spectroscopy. Organic spectroscopy (chapters 12 and 13) will be covered in both lecture and lab time slots.

- **Out of Class Work:**
Students are expected to read the text prior to class. All preparations, reactions, and mechanisms should be thoroughly studied and understood (self-prepared reaction/mechanism flash cards are extremely useful). Homework assignments will be made throughout the semester. These assignments are made for the student's benefit and indicate the type of material to be expected on the hour exams. See [Lecture-Text Problems](#).
- **Testing:**
Four one-hour exams and a two hour final exam, all of which will be cumulative, are tentatively scheduled as follows:

First Exam - September 25 - Friday

Second Exam - October 26 - Monday

Third Exam - November 9 - Monday

Fourth Exam - December 9 - Wednesday

Final Exam - 10:10 class - 1:30-3:30 - December 11 - Friday

Final Exam - 1:25 class - 10:30-12:30 - December 17 - Thursday

There will be no make-up exams for unexcused absences; a grade of zero will be recorded for that test. Make-up exams will only be considered for excused absences*, however, the instructor must be notified of the proposed absence before the scheduled examination. The make-up exam must be completed on the first day the student returns to class. *Excused absences are at the instructor's discretion. Students may be required to submit proof of their excuse before a make-up exam will be administered.

A student may exempt the final examination if their four tests average a value greater than or equal to 95.00. The extra credit work will not be used to determine final exam exemption.

- **Extra Credit Work:**

Students may choose to perform extra credit work, credit for which will be added to their final grade. This work will be equivalent to, but does not replace, any one-hour or final exams (see Grading Scales ** below). Students must complete at least 75% of the extra credit work to receive any credit, credit equivalent to that which they submit; those who complete less than 75% credit on this work will have no extra credit added to their grades. The extra credit work will include a minimum of the following, although other materials may be added at the instructor's discretion: daily outline of lecture text readings; daily rewriting of lecture notes; daily completion of homework problems; chapter preparation of study notecards, including definitions, scientists and their accomplishments with pertinent dates, functional group identities, nomenclature rules, reactions, mechanisms, and other assigned items. Students must submit the information daily at the beginning of class (10:10 am / 1:25 pm); work submitted late will not be accepted. Submitted items should be dated indicating the date of the work (e.g. lecture date for lecture notes) and the submission date.

- **Grading Scales:**

Lecture Grade

One-hour exams (80%) + Final exam (20%) = Lecture average (100%)

[One-hour exams (80%) + **Extra credit work (20%) + Final exam (20%)] / 120 = Lecture average (100%)

Course Grade

Lecture grade (75%) + Lab grade (25%) = Course average (100%)

Letter Grade from Numerical Average

A \geq 90.00, B \geq 80.00, C \geq 70.00, D \geq 60.00, F $<$ 60.00

- **Attendance Policy:**
Students are expected to be present and seated for all Chemistry 3510 classes by 10:10 am / 1:25 pm each day. A student who accumulates more than three (3) unexcused absences will have their lecture grade decreased as follows:
4 to 5 unexcused absences = 1 letter grade decrease in lecture grade
6 to 7 unexcused absences = 2 letter grades decrease in lecture grade
8 to 9 unexcused absences = 3 letter grades decrease in lecture grade
≥10 unexcused absences = 4 letter grades decrease in lecture grade
Excessive excused absences will not be acceptable.
- **Holidays/No Classes:**
September 7 - Monday - Labor Day
October 19 & 20 - Monday & Tuesday - Fall Break
November 11 - Wednesday - Veterans Day
November 26 & 27 - Thursday & Friday - Thanksgiving
- **Other University Dates:**
October 9 - Friday - APSU Automatic W Deadline
October 30 - Friday - Dr. Matthews' Automatic W Deadline (after 2nd test)
November 9 - Monday - APSU/Dr. Matthews' Last Day to Drop a Course
December 24 - Thursday - Final Grades Available Online
- **Classroom Behavior:**
The classroom is expected to be a learning environment, therefore it is expected that students will be quiet, attentive, and courteous. Classes are less than an hour in length, therefore no food or drink is allowed in class. Sleeping will not be tolerated and discussions between students should be taken outside of the lecture classroom. Questions, responses, and discussions should be directed to the instructor, not classmates. Pagers, cell phones, or other electronic devices must be turned off while students are in class, especially during test periods; repeated violations of this will result in the student's removal from the remainder of the class period.
- **Drop/Withdrawal Policy:**
Students who choose to withdraw from organic lecture must also withdraw from organic lab. Students must obtain the instructor's signature to withdraw from CHEM 3510/3511 after the "APSU Automatic W Deadline" date.

October 9 - Friday - APSU Automatic W Deadline
October 30 - Friday - Dr. Matthews' Automatic W Deadline (after 2nd test)
November 9 - Monday - APSU/Dr. Matthews' Last Day to Drop a Course
- **Educational Goals:**
The general objective of the University is to produce educated men and women equipped to use their abilities productively and wisely. The curricula of the University are routes to intellectual maturity and means to the development of ideas, insights, values, and competencies which form a permanent personal capacity for thought and action. The University does not claim that it will develop educated men or women. It does claim it will provide the opportunity and the favorable conditions for students to construct their own education and to acquire the means of making self-education the rewarding enterprise of a lifetime, enabling them to become effective agents of social change.
Given this opportunity at the University in this course, each student should develop, at an appropriate level:
(1) skills of inquiry, abstract and logical thinking, and critical analysis;
(2) literacy in writing, reading, listening, and speaking;
(3) the ability to understand and use numbers and statistics;

- (4) an understanding of the scientific method;
(5) a concentration in a discipline in order to enter a chosen profession, undertake advanced study, or develop an avocation.

These are the marks of an educated man or woman, and it is the aim of the University to challenge and assist in their attainment. To this end Austin Peay State University is committed to the integration of human learning functions and to an orderly educational sequence.

- **Minor Policy:**

According to APSU policy #3:032, minors (defined as those under the age of 18) are not allowed in classrooms. While recognizing that extenuating circumstances occur and make it difficult for some students to attend without bringing children with them on occasion, University policy will be enforced and thus any request for a child to attend lecture or lab classes will be denied. In addition, be aware that minors are not allowed in academic labs, computer labs, science labs, or the library. Further, children cannot be left in halls outside classrooms. Please be aware that the policy on unattended minors is for the purpose of ensuring that our classrooms are conducive to learning and for the safety and protection of minors. For additional information on minors on campus, contact the Office of Student Affairs in the Morgan University Center.

- **Alarms:**

Class (lecture or lab) will be temporarily suspended during a building alarm and students are expected to leave the building in an orderly fashion; class will resume 5 minutes after the alarm ends and safe return is allowed into the building. Class roll will be called and any student who has not returned at that time will receive an unexcused absence. If less than 10 minutes (according to classroom clock) of class time is remaining at the alarm's end, class will be suspended for that day; if in doubt, return to class.