



**CHE 311 - 021 : Organic Chemistry II  
Summer 2009**

**Instructor :** Prof. K.C. Russell

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- What you need:**
- Organic Chemistry, 5<sup>th</sup> ed. Seyhan Ege (ISBN 0-618-31809-7)
  - An “clicker” for taking quizzes (purchase in bookstore)
  - An OWL code (purchase through link on course web page)
- Prerequisite:** A grade of “C” or better in CHE 310
- Class Times:** 8:00 - 9:15 am MTWR; SC 402
- Discussions:** 7:00 - 7:50 am Thursday; SC 402
- Office Hours:** I have an open door policy. But, you can also make an appointment.  
(I am generally on campus from 8:00 AM – 3: 00 PM M-R)
- Learning Outcomes:** At the end of this lecture course students should be able to
- 1) understand the type of reactions typical of compounds containing the C-X group (X = halide, OH, OR, NR<sub>2</sub>), aldehydes, ketones, carboxylic acids, esters, acyl halides, amides, and aromatic rings.
  - 2) analyze compounds based on their functional groups in order to predict chemical reactivity.
  - 3) apply the principles of electron motion to provide mechanisms for a selection of organic reactions
  - 4) analyze and evaluate simple organic molecules in order to create possible synthetic routes
- Semester Exams:** All exams given before the final will consist of short answer questions. The content for the exam may come from sources including, but not limited to, lecture notes, the textbook, on-line homework, handouts and related materials. There may be questions on the exam that have not been explicitly covered in lecture, but should be solvable applying the knowledge provided in the course to that point. Exams will take place in class on the following tentative dates:
- |               |          |                       |
|---------------|----------|-----------------------|
| Hour exam I   | CH 12-15 | Monday, June 15, 2009 |
| Hour exam II  | CH 16-20 | Monday, June 29, 2009 |
| Hour exam III | CH 21-23 | Monday, July 13, 2009 |

**Final Exam:**

Thursday July 23, 2009. 8:00 – 10:00 AM

The final will be the ACS exam, cumulative for the entire book.

A study guide for the final is available through the ACS

[http://www4.uwm.edu/chemexams/guides/details\\_guides.cfm?ID=163](http://www4.uwm.edu/chemexams/guides/details_guides.cfm?ID=163)

The Student Affiliates of the American Chemical Society may also have copies available for sale (at discounted rates) through my office.

**Missed Exams:**

**No make-up exams will be given.** If you are ill the day of one of the three hour exams, you must notify me in advance. The score for the missed exam will be an average of all remaining exams (including the final adjusted to 100 points). You may only miss one exam. You will receive a score of zero if no notification is given. You will be dropped from the class if you miss two exams.

**Regrades:**

Any corrections in grading must be addressed within 48 hours of when an exam or quiz is returned in class. Regrades must be requested in writing using the on-line regrade form. *You must clearly explain all errors and provide support for why your answer is correct.* Requests not giving sufficient explanations will be dismissed. When a regrade is requested, the entire exam may be regraded.

**Homework:**

Homework will be regularly be assigned during the semester using the OWL system. Assignments will typically have a one week duration, although some may be longer or shorter. Students may make as many attempts as they wish before the due date. After the due date I will record the score from all attempts taken up to that point. Each assignment, regardless of the number of questions, will be scaled to approximately 10 points, depending on the number of questions. Students not completing assignments by the due dates can receive half-credit if they the problems are completed before **11:59 PM on Wednesday, July 22, 2009**. Students who have completed assignments by the due dates are encouraged to take additional attempts since exam questions may come from OWL homework assignments. Several of the homework assignments will require the Marvin Sketch and jmol javascript applets. These applets can be downloaded through the OWL system. You will need to develop a proficiency in the use of these applets.

Your home work component of your final grade will be calculated using the following equation:

$$\text{HW} = 85 * \left( \frac{\text{Your total HW points}}{\text{Total possible HW points}} \right)$$

**Quizzes:**

Short quizzes (60 seconds) will be given at the beginning of each class period. Quizzes will usually be three points. Answers will be recorded using clickers in most cases. Quizzes will reflect key concepts from the previous lecture *or material that you should be familiar with from your reading of the lecture material for that class period*. There are absolutely no make-ups for quizzes. Your quiz component of your final grade will be calculated using the following equation:

$$Q = 17.5 * \left( \frac{\text{Your total Quiz points}}{\text{Total possible Quiz points}} \right)$$

Quizzes will begin at 8:00 AM promptly.

**Eligibility:** In order to be eligible for quiz scores to be applied to your grade you must be in good standing in the class. Good standing is defined as a score of 60 or better on the previous exam or instructor approval for individuals with scores below 60. Instructor approval will only be granted after a one-on-one meeting with the instructor. Students with scores below 60 will have one week from the date where the exam is returned to the class to meet with the instructor. This policy will not apply to any quizzes taken during that week. All students begin the class in good standing.

**Grading Policy:**

Each hour exam is worth 100 points and the final is worth 200 points. Graded homework assignments & quizzes will count a maximum of 100 points (see Homework & Quizzes). If you are within 1% of the next higher grade and have 100 % or better on your on-line homework (not rounded), you may receive the next higher grade.

Your final letter grade will be assigned based on the following curve:

A (≥ 86.00 %)	"Represents exceptionally high achievement..."
B (73.00 – 85.99 %)	"Represents high achievement..."
C (60.00 – 72.99 %)	"Represents average achievement..."
D (50.00 – 59.99 %)	"Represents the minimum passing grade..."
F (≤ 49.99 %)	"Indicates failure in a course."

However, under no circumstances can the homework be used to increase your final course grade beyond your best exam letter grade.

For example: E1 = 52, E2 = 56, E3 = 54 and Final = 110. Your best letter grade on an exam is a 'D'. You cannot receive a letter grade of 'C' for the course even if your homework score = 100 and your final total is 61 %.

**Posting Scores**

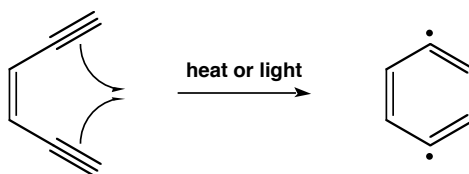
All scores in this class will be posted through Blackboard.

- Nobel Laureates** The impact that the Nobel Laureates have had on the sciences, medicine, literature, and peace cannot be understated. For this reason each student will adopt a Chemistry Nobel Laureate. Extra credit points will be awarded on some exams for knowing the year when your laureate won his / her prize and the contribution for which the prize was awarded. Laureates can be chosen though the course web page.
- Email** I regularly contact the entire class through email. You will enter your email address when you choose your Laureate. I generally do not use Blackboard to contact the class. If your e-mail address changes or you wish to give me additional email addresses please let me know (by email, of course). I am not responsible for emails that are not received.
- Additional Problems:** In combination with your reading of the text, you should practice the problems within the chapters. Some problems at the end of the chapter will be also suggested and posted on the Internet. It is recommended that you do all the problems in the book, not just those listed on the internet. Textbook problems will not be graded.
- Tutorials:** There are a number of Internet tutorials created for this class. These tutorials are designed to help you with many of the more difficult problems of organic chemistry, in particular those which are spatial.
- On Reserve:** The following are on reserve at the library (under Kempton):  
1) Solution Manual for Ege  
2) Guide To Electron Pushing
- What I recommend:** **Colored Pens:** In my lectures I often use a color scheme to highlight different aspects of the material. Students are encouraged to also use colored pens when taking notes.  
**Three Notebooks:** Use one notebook to take in class notes. Use a second notebook to critically recopy your notes while supplementing them with material from the textbook. Identify questions and get answers! Use the third notebook to work problems from the text and from OWL.  
**Model Kits:** There are many types of models, but the models sold by the ACS Student Affiliates will be sufficient (\$20 cash – my office). **You will be allowed to use these models on all exams except the final.**
- Attendance:** NKU policy states that class attendance is mandatory. I will take attendance daily. Students not attending 80 % of the lectures will be dropped from the course. Instructor initiated drops will not be executed until after the first exam. Class begins at 8:00 AM promptly. Tardiness is a distraction to the instructor and other students. I use the Official US Time Clock (<http://www.time.gov/>).

**Disability Services** Students with disabilities who require accommodations (academic adjustments, auxiliary aids or services) for this course must register with the Office of Disability Services. Please contact the disability service office in University Center Suite 320 or by calling (859) 572-6373 for more information. Verification of your disability is required in the disability services office for you to receive reasonable academic accommodations. Visit the disability services website at <http://www.nku.edu/~disability>.

**Academic integrity** The work in this course is subject to The *Northern Kentucky University Student Honor code*. The Honor Code is a commitment to the highest degree of ethical integrity in academic conduct, a commitment that, individually and collectively, the students of Northern Kentucky University will not lie, cheat, or plagiarize to gain and academic advantage over fellow students or avoid academic requirements.

The *Northern Kentucky University Student Honor code* will be strictly enforced in this class. Cheating is an extremely serious offense and will not be tolerated! Any unauthorized assistance on an examination or homework is considered cheating. The use of previously graded e-grade assignments (other than your own) is considered cheating. In accordance with the *Code of Student Rights and Responsibilities*, faculty members have the right to determine actions to be taken when a student is caught cheating. Penalties for cheating can range from but are not limited to scores of zero on individual assignments or exams to expulsion from the University and does include failure of the course.



**The Bergman Cyclization**

Note: This syllabus is subject to change