Introductory Organic Chemistry Lecture ~ CHM 124
Course Information & Syllabus ~ Spring Semester, 2013

Instructor
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Office: Pastore 215B Office Hours: posted online at CHM 124 Sakai site

Required Lecture Materials
• Textbook (or eBook, via OWL): Organic & Biochemistry for Today, by Seager/Slabaugh
  Students who prefer a hardcopy textbook may use ANY recent edition of the Seager/Slabaugh textbook
• OWL (Online Web Learning) System for Seager/Slabaugh 7th edition: http://www.cengage.com/owl/
  Students are responsible for completing each of the OWL Assignments by its posted due date/time.
• Study resources posted at the CHM 124/126 course website: http://www.chm.uri.edu/chm126/index.html
  Students are expected to print their own copies of course documents and carefully study ALL posted lecture materials.
• Pre-Lecture Lessons, Skill Checks, Announcements, and Threaded Discussions at the CHM 124 Sakai website
  Students are responsible for completing each Pre-Lecture Lesson and Skill Check by its posted due date/time, and for
  carefully reading the posted Sakai Announcements and Threaded Discussions.
• Scientific calculator (with log and exponent functions, for pH/pKₐ study)
  No other electronic devices may be used in class at any time.

Class Meetings
Section 002:       T Th       12:30 – 1:45 PM       Pastore 124 Main Lecture Hall
Section 001:       T Th       3:30 – 4:45 PM       Pastore 124 Main Lecture Hall
To be successful, students will need to consistently and diligently prepare for lecture, participate fully in every class session,
and then practice the required skills – to become confident, competent and efficient at analyzing and solving problems.

Grading Policy
Each student’s course grade will be determined from the results of four Lecture Exams, the OWL (Online Web Learning)
System, and the comprehensive Final Exam:

<table>
<thead>
<tr>
<th>Component</th>
<th>Weight</th>
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<tbody>
<tr>
<td>4 Lecture Exams (17% each)</td>
<td>68%</td>
</tr>
<tr>
<td>OWL (Online Web Learning) Homework</td>
<td>12%</td>
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<tr>
<td>Sakai Concept Checks and Practice Tests</td>
<td>3%</td>
</tr>
<tr>
<td>Comprehensive Final Exam</td>
<td>17%</td>
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<tr>
<td></td>
<td>100%</td>
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The Final Exam score will replace the grade of any one of the four Lecture Exams that is missed OR lower than the Final Exam score. Thus the Final Exam may count as much as 34% of a student’s overall grade.

No extra credit assignments will be given (other than those in OWL), and the standard grading scale will be in effect:

90%-+ = A- / A; 80-89% = B- / B / B+; 70-79% = C- / C / C+; 60-69% = D / D+; <60% = F.

Grades in CHM 124 are earned by demonstrating mastery/proficiency in the required skills; these skills include critical thinking and problem-solving: the ability to apply organic chemistry concepts to relevant scenarios, and predict physical and chemical properties from a study of a compound’s molecular structure (i.e., explain how Structure determines Function).

To be clear: Each student’s grade is determined by the quality of the student’s performance on the lecture course work items. The grade is not open to negotiation, and it is not dictated by what’s needed to progress in the student’s chosen program of study. The grade must be earned by achieving proficiency in (and ideally, mastery of) the skills identified as essential to ongoing success in the student’s degree program.

The purpose of replacing a missed Lecture Exam with the Final Exam score is not to boost each student’s overall average. Instead it is to eliminate the need for make-up tests for any students who are absent on the day of a Lecture Exam.
**Lecture Work Items:**

1. **Lecture Exams**

Lecture exams are likely to have two parts:

1. a portion with true/false and multiple-choice questions that will be scantron-graded, and
2. a portion with structure-drawing, short answer, and problem-solving questions.

Exam questions will come directly from the content presented and discussed during lecture, and are likely to be similar to the problems in the OWL online study system, the Sakai Skill Checks, the Old Exam Questions posted on the CHM 124 course website, and the recommended problems in the Seager textbook.

You MUST commit to working as many of these practice problems as possible as practice for taking exams – your goal is to become confident and efficient at analyzing and solving problems.

**Students who get the MOST practice solving problems tend to have the greatest success in this course.**

2. **OWL (Online Web Learning) System**

The OWL (Online Web Learning) System was designed to help students learn, and then practice the skills needed for success in their chemistry course.

The OWL assignments include required “pools” of homework questions, as well as extra credit tutorials, exercises, and “active figures.” Many of the extra credit assignments provide exceptional learning opportunities, while the homework pools provide a chance to both learn and practice the needed skills.

Completion of a homework pool assignment will require that you answer a particular number of questions correctly (usually two out of three) in a single attempt. These homework assignments are called “pools,” because a number of questions are selected at random from a larger pool of questions each time the assignment is opened. This means that even after you’ve completed the assignment (and received credit for your work), you can re-open the assignment and answer a different set of questions to get additional skill practice. Many students choose to re-visit and re-work completed OWL assignments prior to exams, using OWL as a tool to review key concepts and “skill-drill” the various types of problems.

Thus your objective in using the OWL system should NOT be to simply click your way through each assignment, trying to earn the “green check mark” (and corresponding credit). Your goal should be to carefully work your way through each assignment, trying to learn as much as you can. And you may choose to work the assignment a second (or a third) time to answer new questions and get additional skill practice. In short, your goal should be use OWL as an integral part of your learning and practice for the in-class exams.

You'll need to stay on track and on time with your OWL homework, as each assignment will have a due date that corresponds with the timing of each topic in lecture. As ample time is provided to complete each assignment, NO EXTENSIONS of due dates will be granted. Students should NOT inquire as to whether they may have an OWL due date extended.

As the OWL system is intended as a key part of students’ learning in this course, the assignments may be worked in student study groups and/or with help from a tutor.

Finally, you should be aware that there is a learning curve to using the OWL structure-drawing software. A tutorial is provided for the software, but you should start working the assignments immediately, so you’ll have time to build proficiency and get help if needed. Also – you should make a practice of ALWAYS drawing the molecular structures ON PAPER FIRST, and THEN attempting to draw the structures in OWL.
3. Sakai Pre-Lecture Lessons and Skill Checks

These Sakai tools will serve as the guide to your preparation for lecture, your active participation in each class session, and your post-lecture skills practice.

The Pre-Lecture Lessons will contain study instructions, Video Lessons, and links to the relevant Skills Summaries, One Page Lessons, and Old Exam Questions.

The Skill Checks will probe your understanding of key concepts, and provide an opportunity to skill-drill on practice tests prior to taking the in-class exams. Similar to OWL, the Sakai Skill Checks will consist of “pooled” questions – a set number of questions will be selected at random from a larger pool each time you open the Skill Check. So just like OWL, after you’ve completed (and received credit for) that Skill Check (or Multiple Choice Practice Test), you can re-open it to answer a different set of questions, and “skill-drill” until you feel you confident that you thoroughly understand every concept and can correctly answer every question.

4. Comprehensive Final Exam

The Final Exam will consist of 100 multiple-choice questions, and will be scantron-graded.

Lecture Attendance, Preparation, and Participation

You’ll need to plan for significant study time outside of class – both BEFORE and AFTER you attend lecture. The rule of thumb for most college courses: 2 to 3 hours of study time outside of class for every 1 hour of in-class lecture. As CHM 124 meets a total of 2½ hours each week, you should plan to spend approximately 5 to 7½ hours every week studying chemistry.

You should prepare to participate actively in each lecture by:

• Reviewing concepts from previous lectures (and/or previous courses) that are essential to your learning of new skills – by carefully studying any posted Video Lessons, and working through the relevant One Page Lessons and Skills Summaries.

• Becoming familiar with the concepts to be presented in lecture ahead of time – by carefully studying any posted Video Lessons, completing the Sakai Skill Checks, and pre-viewing the relevant Skills Summaries and OWL tutorials.

• Staying current in practicing problems relevant to each lecture concept – by completing the posted OWL Assignments, Sakai Skill Checks, Old Exam Questions, and recommended End-of-Chapter problems.

You should identify several study partners in your lecture section. In the event of an absence, you should plan to immediately obtain copies of missed lecture content from one (or more) of your study partners. After careful reviewing your partner’s lecture notes and the relevant portions of the Skills Summary and textbook, you may also come to my faculty office with your written list of questions regarding the concepts and skills discussed/demonstrated in the missed lecture.

You CANNOT AFFORD TO FALL BEHIND in this course! EVERY new concept will build on concepts that students should have previously MASTERED in this course (or in the pre-requisite course: CHM 101/112 or CHM 103). You MUST take responsibility for reviewing those concepts as needed.

Study Help Resources

• Supplement Instruction (SI) Sessions provided by the Academic Enhancement Center (AEC).

CHM 124 is one of several challenging first-year science/math courses that includes Supplemental Instruction (SI) – a popular type of learning support used by colleges nationwide. At URI, the Academic Enhancement Center (AEC) trains SI Leaders to facilitate these special learning sessions (SI Sessions) for students.

The SI Leaders for our CHM 124 sections, will sit in on our lecture, meet with me regularly, and hold two 90-minute help sessions each week for any CHM 124 student who wants to attend. The SI sessions are always highly interactive, and provide a fun, safe, comfortable setting where students can ask questions freely, practice problems together, and review/re-enforce key learnings. The AEC has the data to show just how effective SI is – students who regularly participate in the sessions tend earn grades a half to a full letter grade higher than their classmates who don't attend.

The schedule of SI Sessions is provided at:  http://www.uri.edu/aec/sisched
• **Chemistry Graduate Student Teaching Assistants in the Chemistry TA Help Office, Pastore 215.**

Some of most successful students in chemistry courses are those who regularly use the Chemistry Help Office as a place to study and work problems, either alone or in small groups. That's because there's nearly always someone close by who can help out when these students get stuck on a problem or need a question answered. Three of the five Chemistry Lecturers (Drs. Brittain, McGregor, and Geldart) have their faculty offices in Pastore 215, and the study area is also fully staffed by Chemistry Teaching Assistants (TAs). Students can bring their laptops (or use one of the computers in the corner of the office) to work their online homework assignments.

If you have a general question about lecture, or need help with questions/calculations, you can see any one of the TAs (however, those TAs teaching the CHM 126, 226, 292, or 425 Organic Chemistry labs will be most familiar with the content of this course).

A complete schedule of TA office hours is posted at: [http://www.chm.uri.edu/chm126/index.html](http://www.chm.uri.edu/chm126/index.html).

• **Chemistry Tutors at the Academic Enhancement Center.**

The AEC ([www.uri.edu/aec](http://www.uri.edu/aec)) can help you keep up with the class work and study course materials effectively. Their friendly staff of learning specialists and student tutors can help you identify a study approach, develop effective study strategies, understand course concepts, and practice the skills productively. The center is also a place you can go to study on your own, as there is study space available for individuals and/or groups.

The AEC's tutoring service is designed to support the goals of in-class instruction, and to promote effective study techniques. The tutors are URI students who have been recommended by their professors. They are hired based on their level of success in the courses they tutor, their excellent study skills, and on their ability to work well with other students. Tutors conduct one-on-one and small group sessions for students in a variety of courses. The tutoring service is available by appointment and on a drop-in basis (first come, first served) and is FREE.

Many students believe that tutoring is something you do only if you're having problems in a class. *This is a mistake!* Tutoring is an effective means of studying. When you interact with a tutor, your brain processes the information more effectively, and the tutor can help you identify what you don't know and/or show you more effective ways of learning.

The AEC is open Monday – Thursday from 10 AM until 9 pm, and on Fridays until 1 pm. All services are free (the coffee is free as well). You can call the AEC for complete information at 874-2367, or just stop by the center on the fourth floor of Roosevelt Hall.

To obtain a complete schedule (including when tutors are available specifically for CHM 124), see the AEC website at [www.uri.edu/aec](http://www.uri.edu/aec), call (401) 874-2367, or stop by the fourth floor in Roosevelt Hall.

• **Assistance from Dr. Brittain, during office hours or via email.**

**Office Hours:** My office hours are posted on the CHM 124 Sakai site. (An appointment is not needed during a professor’s posted office hours.) Since my faculty office is accessed through the Chemistry TA Help Office (Pastore 215), students who stop by without an appointment (and find that I’m unavailable) can often get their questions answered by a Teaching Assistant or another chemistry lecture (Drs. Mike McGregor or Susan Geldart).

Since I have responsibility for the CHM 126 laboratory course, I'm always in the building while the lab is running. So please feel free to stop by at times other than my office hours. I keep my appointment schedule posted on the outside of my door, so students are able to see when I'm in meetings or teaching class. Please keep in mind that at 8 AM, 11 AM, and 2 PM, I’ll be in the Pastore hallway to start each lab section.

**Email:** Please understand that because I have responsibility for several large courses, I receive a substantial number of email messages each day. To ensure that your email will be answered, it’s recommended that you:

- Use a concise, yet descriptive subject line.
- Include your full name, chemistry lecture (or lab) course number, and section number in the message.
- Make sure the question asked or information conveyed in your message is both clear and complete.

**Study Help Advice**

Whether you’re seeking help from a Professor, a Chemistry Teaching Assistant, or an AEC Tutor or SI Leader, you need to arrive at your help session on time and fully prepared, so as to make the discussion as productive and efficient as possible. This means that you should bring all relevant study/reference materials with you to the session.
These include:

• Your lecture textbook
• Print-outs from the course website (Skills Summaries, Old Exam Questions, Lab Handouts, etc.)
• Your notebook of worked homework problems and lecture notes
• For help with the OWL online homework, your laptop or screen prints and/or hand-written notes of that clearly indicate the particular assignment and question
• And the most important item – your written list of specific questions and/or your goals for the help session.

Illness Due to Flu

The nation is experiencing widespread influenza-like illness. Any student who develops flu-like symptoms is advised to stay home until the fever has subsided for 24 hours. If you exhibit such symptoms, please do NOT come to class, but be sure to keep up with your studies via the Sakai Pre-Lecture Lessons and Skill Checks and the OWL online homework system.

The Centers for Disease Control and Prevention have recommended simple methods to avoid transmission of illness. These include: covering your mouth and nose with tissue when coughing or sneezing; frequently washing/sanitizing your hands; avoiding touching your eyes, nose, and mouth; and staying home when you are sick.

For more information, please view the CDC Flu website: [http://www.cdc.gov/flu/](http://www.cdc.gov/flu/)

The URI Health Services website will also provide advice and local updates: [http://www.health.uri.edu/](http://www.health.uri.edu/)

Academic Honesty

Academic dishonesty in any form is considered a serious offense, and disciplinary action will be taken immediately. The URI policy on academic honesty is detailed in the student handbook (available online), and it is summarized below:

Students are expected to be honest in all academic work. A student’s name on ANY written work shall be regarded as assurance that the work is the result of the student’s own thought and study. Work should be stated in the student’s own words, and produced without assistance.

The following are examples of academic dishonesty:

• Unauthorized possession or access to exams.
• Unauthorized communication during exams.
• Unauthorized use of another’s work or preparing work for another student.
• Taking an exam for another student.
• Altering or attempting to alter grades.
• The use of notes or electronic devices (e.g. cell phones, calculators) to gain an unauthorized advantage during exams.
• Facilitating or aiding another’s academic dishonesty.

When there is an allegation of academic dishonesty, the instructor may:

• Fail the student for the assignment, or recommend that the student fail the course.

Important Spring Semester Deadlines

• Last day of e-Campus open add period: Tuesday, January 29th
• Last day of e-Campus add with permission number: Tuesday, February 5th
• Last day for students to drop courses via e-Campus with no transcript designation: Wednesday, February 13th
• Last day for students to drop courses via e-Campus (with drop designated on transcript): Wednesday, March 6th
• Freshman mid-term grades posted in e-Campus: Monday, March 18th
## Syllabus

<table>
<thead>
<tr>
<th>Week #</th>
<th>TUESDAY</th>
<th>THURSDAY</th>
</tr>
</thead>
</table>
| 1      | 1/22: Advising Day | 1/24: Course Information  
S/S Ch 11: Organic Compounds: Alkanes |
| 2      | 1/29:  
S/S Ch 11: Organic Compounds: Alkanes | 1/31:  
S/S Ch 11: Organic Compounds: Alkanes  
S/S Ch 12: Unsaturated Hydrocarbons |
| 3      | 2/5:  
S/S Ch 12: Unsaturated Hydrocarbons | 2/7:  
S/S Ch 12: Unsaturated Hydrocarbons |
| 4      | 2/12:  
S/S Ch 12: Unsaturated Hydrocarbons | 2/14:  
EXAM 1 |
| 5      | 2/19:  
S/S Ch 13: Alcohols, Phenols, Ethers, Thiols | 2/21:  
S/S Ch 13: Alcohols, Phenols, Ethers, Thiols |
| 6      | 2/26:  
S/S Ch 13: Alcohols, Phenols, Ethers, Thiols | 2/28:  
S/S Ch 14: Aldehydes and Ketones |
| 7      | 3/5:  
S/S Ch 14: Aldehydes and Ketones | 3/7:  
EXAM 2 |
| 8      | 3/12: Spring Break | 3/14: Spring Break |
| 9      | 3/19:  
S/S Ch 15: Carboxylic Acids and their Derivatives | 3/21:  
S/S Ch 15: Carboxylic Acids and their Derivatives |
| 10     | 3/26:  
S/S Ch 15: Carboxylic Acids and their Derivatives | 3/28:  
S/S Ch 16: Amines and Amides |
| 11     | 4/2:  
S/S Ch 16: Amines and Amides | 4/4:  
EXAM 3 |
| 12     | 4/9:  
S/S Ch 17: Carbohydrates | 4/11:  
S/S Ch 17: Carbohydrates |
| 13     | 4/16:  
S/S Ch 17: Carbohydrates | 4/18:  
S/S Ch 18: Lipids |
| 14     | 4/23:  
S/S Ch 19: Proteins | 4/25:  
EXAM 4 |
| 15     | 4/30: Last Class Meeting | 5/2: Reading Day |
| 16     | 5/7:  
FINAL EXAM for Section 001 (3:30 PM class)  
3:00 – 6:00 PM in Pastore 124 Main Lecture Hall | 5/9:  
FINAL EXAM for Section 002 (12:30 PM class)  
8:00 – 11:00 AM in Pastore 124 Main Lecture Hall |