Chemistry 3153 Section 001-- Organic Chemistry II Biological Emphasis
Spring 2013 Syllabus
Lectures: 9:30-10:20 am Monday, Wednesday, and Friday in PHSC 201
January 14, 2013- May 7, 2013

Instructor: Nathan S. Green
Office: Chemistry Building Annex (ChBA) 218; Email: nsgreen@ou.edu
Course Web Page: http://learn.ou.edu/ under Chemistry 3153 Sec 001
Office Hours:
MWF 10:30-11:30 (immediately following class) ChBA 218
Additional hours may be made by arrangement. The instructor will attempt to respond to email questions by the next weekday.

Teaching Assistant: Nick P. Godman Email: nichopg@ou.edu
Other Materials:
1) Access to web-posted material is necessary (www.learn.ou.edu).
2) Molecular model kits are helpful.

Course Goals. The purpose of this course is to complete the second half of a one-year overview of the underlying theory, basic reaction mechanisms and fundamental synthetic transformations of organic chemistry. We will cover in order chapters 17-26 in D. Klein’s Organic Chemistry textbook with additional material from chapter 27. Note that this course is an intensive coverage of the material and it is expected to be a full time endeavor.

Course Schedule. See attached sheet for planned lecture and exam schedule. The exams are scheduled Fridays during class, 9:30-10:20 am in PHSC 201 as follows: (Exam 1: Feb 15, Exam 2: March 29, and Exam 3: April 26) and the final on Tuesday, May 7 (8:00 am – 10:00 am) in PHSC 201. Please note university-scheduled final exam date.

Lectures. Lectures will begin promptly at 9:30. Lectures will be written “live”, students are strongly encouraged to take notes.

Reviews. Review sessions will be held before exams as time permits.

Assigned Text Problems– The instructor will include assigned text problems along with each lecture. You are responsible for working all of the assigned problems and checking their accuracy using the study guide/solutions manual. Questions remaining after checking the solutions manual should be discussed with the instructor. These problems will NOT be graded by the instructor.

Action Center Problems/Problem sessions– In addition to the assigned in chapter problems, you will be given opportunity to work several d2l-posted problems in groups during action center meetings from 6:00-8:00 pm on Tuesdays in Wagner Hall 135/140. These sessions are not strictly required and are not graded but attendance is strongly encouraged as this provides an excellent opportunity to learn the material. One action center worksheet will be given per meeting.

Quizzes. There will be in-class quizzes following the completion of chapter material. These quizzes will be announced as the material is covered.

Exams - You will be responsible for all material covered in class, problem sessions or in the assigned chapters of the book unless specifically told by the instructor that the material will not be on the exam. Some required material will not be covered in lecture or even included in the lecture notes, you will be responsible for learning that material from the text and assigned problems. The mid-term exams will
consist of several multiple choice-type questions, some short response questions and some longer 
response questions. Requests for re-grading exams will be accepted for within two days of the return day 
of the exam. If you wish your exam to be re-graded, turn it into the instructor who will re-check the entire 
exam. Extra explanations will NOT be accepted—it is up to you during the exam period to state clearly 
what you mean, not in an addendum to the exam. It is only fair to grade what you originally wrote. If you 
wish to have the grading of a particular problem explained but not changed, this can be done during office 
hours. Addition and recording errors unfortunately occur and will be corrected without re-grading the 
exam (but only within the two days of returning the exam).

**Grading** - Grades will be determined by your results on the exams and quizzes as follows:

<table>
<thead>
<tr>
<th>Component</th>
<th>Points</th>
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</thead>
<tbody>
<tr>
<td>Organic I Review</td>
<td>20 pts</td>
</tr>
<tr>
<td>10 quizzes* (10 pts ea) low dropped</td>
<td>90 pts</td>
</tr>
<tr>
<td>3 regular semester exams** (100 pts each)</td>
<td>300 pts</td>
</tr>
<tr>
<td>1 final exam*** (cumulative)</td>
<td>150 pts</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>560 pts</td>
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</tbody>
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The approximate course grade guidelines are as follows: A > 476 pts (85%), B > 420 pts (75%), C > 364 pts (65%), D > 308 pts (55%), F < 308 pts.

* The lowest quiz grade will be dropped from the total
** The lowest of three exam grades will be replaced by the average of all three
*** The final exam must be taken or a course grade of F will be assigned. The exam is scheduled by the University for Tuesday, May 7, 8:00-10:00 am in PHSC 201. This exam will have the same format as the midterms and will emphasize Organic II material, but will be comprehensive for the entire year. Plan your travel schedules accordingly.

No accommodation will be made for non-excused absences. For excusable absences you must provide 
me with timely (contact by next day) documentation and see me to make individual accommodations.

**Email.** Students have the responsibility to read and respond to any email messages sent during the 
week by the instructor to their OU email account within 24 hours. Messages will only be sent to OU 
accounts. The instructor will attempt to respond to emails with specific questions by the following 
weekday. Do not expect responses to emails over the weekend. Since organic chemistry is such a visual 
subject, most problems are much better dealt with in person; email should not be used as a substitute for 
visiting office hours. More general questions will be addressed the following lecture.

**Academic Misconduct.** For the purposes of this course, any instance of a student receiving any type of 
help on an exam, problem set or quiz from another person or any source (notes, etc) not authorized by 
the instructor shall be considered academic misconduct and as a result will be penalized to the fullest 
extent possible. Students are to refer to the Provost's pages on academic integrity (http://www.ou.edu/provost/pronew/content/integritymenu.html) for university policies and regulations 
related to your rights and obligations as students.

**Disruptive Behavior.** Any student engaging in behavior deemed by the instructor to be disruptive or 
distracting will be asked to leave the classroom for the remainder of the lecture or exam. Disruptive 
behavior includes receiving phone calls or texting—please turn your phones off before entering the class 
or exam and put them out of sight.

**Special Accommodations:** The University of Oklahoma is committed to providing reasonable 
accommodation for all students with disabilities. Students with disabilities who require accommodations in 
this course are requested to contact the instructor as early in the semester as possible. Students with 
disabilities must be registered with the Disability Resource Center prior to receiving accommodations in 
this course. The Disability Resource Center is located in Goddard Health Center, Suite 166, phone 
405/325-3852 or TDD only 405/325-4173, web: http://www.sa.ou.edu/ods/. The instructor is committed to 
complying with all requests for accommodation coming through the Disability Resource Center.
Students are to refer to the Provost’s web site for university policies and regulations related to your rights and obligations as students.

**Changes.** The instructor reserves the right to change by addition and/or subtraction any and/or all materials contained in this syllabus. This includes, but is not limited to, course content, assignments, due dates, and portion(s) of the grade assigned to individual items within the course.

**Topics (corresponding chapters in D. Klein’s Organic Chemistry):**

17. Conjugated pi-systems and addition reactions
18. Benzene and Aromatic Compounds
19. Aromatic Substitution Reactions

**Exam 1** combining Org I review and emphasizing Chapters 17-19

20. Carbonyl Chemistry I—Aldehydes and Ketones
21. Carbonyl Chemistry II—Carboxylic Acids, Esters and related derivatives
22. Carbonyl Chemistry III—Reactions at position alpha to carbonyl—enolates

**Exam 2** emphasizing Chapters 20-22

23. Amines—properties, preparation and reactivity
24. Carbohydrates—properties and reactivity
25. Amino Acids, Peptides, Proteins—overview of properties, preparation and reactivity
27. Synthetic polymers—properties, uses, and chemistry

**Exam 3** emphasizing Chapters 23-25, 27

26. Lipids—overview of properties and reactivity

**Final Exam** Cumulative with new material from Chapter 26