Chem 234 Organic Chemistry Fall 2013

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Instructor: Dr. John H. Penn

Office: 561 Chemistry Research Laboratory (i.e., the Chemistry Annex)

Telephone: 304-293-0915

Email: John.Penn@mail.wvu.edu for fastest response. jpenn@we-learn-horizon.com also gets slower service.

http://www.as.wvu.edu/~jpenn

Syllabus Outline

(Click on the link to go to the proper part of the document)

General Information

Final Course Letter Grade Determination

Exam Schedule

Useful Websites to Help the Organic Chemistry Class

General Information

Laboratory (i.e., Chem 236)

Chemistry 236 is a co-requisite of Chemistry 234. If you have already taken, and passed, Chem 236 in a previous semester, you do not have to take it again. If you chose to withdraw from Chem 234 later in the semester, you may remain in Chem 236 with the consent of your laboratory instructor. There have also been issues related to scheduling of the lab. If all lab sections are full, and you cannot fit Chem 236 into your schedule, you may take it in a later semester.

1. Chem 236 is a different course

The laboratory grade does not have any influence on the determination of the final grade, since Chem 236 is a separate entity for registration purposes and is assigned a completely separate grade. This means that the lab grade will not positively influence your lecture grade, nor will your lab grade be negatively influenced by your lecture grade.
2. **Laboratory schedule**

A schedule of the experiments can be found in the [Chem 236 Lab Schedule](#).

3. **Laboratory Fees**

Every student must pay a lab fee. The laboratory fee is NOT REFUNDABLE after the first week of classes. A charge for excessive breakage may also be levied.

## Lecture (i.e., Chem 234)

1. **Required Materials**

All homework will be administered via the WE_LEARN system ([https://ondemand.questionmark.com/399959/perception](https://ondemand.questionmark.com/399959/perception)). If you do not have an account, email Dr. Penn to request one.

Practice tests can be found in the WE_LEARN system. Log in using your mix account ID (Example: jpenn) as a username and your first name as an initial password.

2. **Highly Recommended Materials**


3. **Homework**

Homework will be assigned through the WE_LEARN system. As of the writing of this syllabus, this system is still a work in progress. Details of getting your personal account will be announced in class. If you don’t have an account, email Dr. Penn to get an account.

4. **In Class Participation**

A grade for in-class participation will be generated for this course. Approximately four (4) graded questions\(^1\) will be asked in each class session, for which there will be a definite time

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\(^1\) Four questions per class is the planned number. Sometimes, it may be more questions per class and sometimes it may be less.
limit. Grading of these questions will begin in the second week of classes and will continue for each class period until the end of the semester. To provide allowance for illness and excused university functions, the lowest six class periods will be dropped from the grading, making a total of approximately 37 graded class periods.

The backbone of this in-class participation grading system will be the TopHat CRS system, where the innovative use of technology to allow you to provide answers to questions, where a texting SMS or web-based system will be used to record and evaluate your answers to questions. Information about how to get an account for the semester will be made available during the first week of class (and as an appendix to this syllabus). The cost is $20/person\(^2\) for the TopHat CRS account, if you purchase on-line. My understanding is that codes for these accounts can be purchased in the bookstore. Purchasing information is available as an appendix to this syllabus. Additionally, you will need a cell phone or some wi-fi enabled devise to be able to submit answers.

We’ll all be learning how to use this system together. That is one reason why the first week of classes will be used to train everyone (i.e., both students and professor) about how to use the system. Each question is graded ~50% on participation (i.e., do you answer the question?) and ~50% on correctness (i.e., are you paying attention and trying to learn?).

5. Exams

In the spring semester 2009, a class vote was taken to determine what methods would be used to administer exams. The final vote was 171 votes for exams on the computer system with question selection randomly from a large database\(^3\) versus 4 votes for a traditional exam with paper and pencil. Therefore, exams will be administered via computer using the WE_LEARN system. Again, this system is a work in progress and details for accounts and for logging on will be provided in class. Further, the computer lab for testing remains to be determined. Details will be provided in class.

The time for taking an exam is somewhat flexible in order to allow for evening classes, work, or other activities that students get involved in. Two nights will be allowed for test taking, where you may take the test one time at a time of your choice. We will conduct a class poll on the first day of class to determine whether the tests will be given on Tuesday and Wednesday or, alternatively, Wednesday and Thursday. Testing during the daytime is also possible by appointment in a mutually acceptable proctored environment.

\(^2\) $20.00 Canadian, not US Dollars

\(^3\) The system also allows practice tests to be taken in advance of the exam.

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### a. Dates

<table>
<thead>
<tr>
<th>Exam number</th>
<th>Date</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exam Number 1</td>
<td>Wednesday, September 25 (or Tuesday, September 24)</td>
<td>7:00 – 10:00 PM</td>
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<tr>
<td></td>
<td>Thursday, September 26 (or Wednesday, September 25)</td>
<td>7:00 – 9:00 PM</td>
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<td></td>
<td></td>
<td>9:00 – 11:00 PM</td>
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<tr>
<td>Exam Number 2</td>
<td>Wednesday, October 23 (or Tuesday, October 22)</td>
<td>7:00 – 10:00 PM</td>
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<tr>
<td></td>
<td>Thursday, October 24 (or Wednesday, October 23)</td>
<td>7:00 – 9:00 PM</td>
</tr>
<tr>
<td></td>
<td></td>
<td>9:00 – 11:00 PM</td>
</tr>
<tr>
<td>Exam Number 3</td>
<td>Wednesday, November 13 (or Tuesday, November 12)</td>
<td>7:00 – 10:00 PM</td>
</tr>
<tr>
<td></td>
<td>Thursday, November 14 (or Wednesday, November 13)</td>
<td>7:00 – 9:00 PM</td>
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<td></td>
<td></td>
<td>9:00 – 11:00 PM</td>
</tr>
<tr>
<td>Exam 4 (Final Exam)</td>
<td>Monday, December 16</td>
<td>7:00 – 10:00 PM</td>
</tr>
<tr>
<td></td>
<td>Tuesday, December 17</td>
<td>7:00 – 9:00 PM</td>
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<td></td>
<td></td>
<td>9:00 – 11:00 PM</td>
</tr>
<tr>
<td></td>
<td>Wednesday, December 18 (Retake)</td>
<td>7:00 – 9:00 PM</td>
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</table>

### b. Make-up Exams

Make-up examinations will be conducted at a time that is mutually acceptable to both the student and the instructor. Make-up examinations scheduled prior to the times indicated above for the computer exams will be conducted on the computer. Make-up examinations scheduled after the time of the paper exam will be conducted as oral examinations, with students answering questions on the blackboard of the instructor's office. This policy will be strictly enforced.
c. Course Letter Grade

Your final letter grade will be determined after calculation of your final numerical score, which will then have a letter grade assigned to it, based upon the standard scale of 90-100% = A, etc. The final numerical score is calculated using the following criteria.

i. Regular Exams

Exam 1, Exam 2, and Exam 3 are each worth 20% of the final grade for this course. **Note:** pay attention to the percentage score, and not the total number of points on the exam, because each exam will have a maximum score of 110 points. It is the percentage score which is calculated for the final grade (i.e., 93 points = 93 points/110 points = 84.5%, which is a grade of B, and NOT an A.

<table>
<thead>
<tr>
<th>Calculation of the Final Numerical Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exam 1</td>
</tr>
<tr>
<td>Exam 2</td>
</tr>
<tr>
<td>Exam 3</td>
</tr>
<tr>
<td>Exam 4</td>
</tr>
<tr>
<td>Homework</td>
</tr>
<tr>
<td>Class Participation</td>
</tr>
<tr>
<td>Bonus Credit</td>
</tr>
<tr>
<td>Total</td>
</tr>
</tbody>
</table>

ii. Final Exam

The final examination will be a cumulative examination. Therefore, it will be weighted more heavily in the final grade determination and is worth more than any of the individual exams. The final exam is worth 30% of the final grade.

iii. Homework

The homework for this course will be assigned through the WE_LEARN system. The homework score is worth 5% of the total grade for the course. The final grade will be based upon the cumulative total of homework scores, as calculated in the WE_LEARN system.

It is possible to take an assignment more than one time and the grade determined will be the maximum score that you achieve for an assignment. The idea behind the system is that you may learn while doing the homework and improve your scores as your understanding increases. There will be no time extensions for any reason. It is the expectation of the instructor that everyone can achieve a 100% homework score. The time stamp of the computer system is used to validate the time of submission of the homework.

iv. Class Participation

As described above, a class participation grade will be made.
v. Bonus Credit

At the end of the semester, I am always asked if there is any way to get bonus credit. The answer is "yes". You may get bonus credit by being the first to report an error in the homework system. Because the procedure is a bit complicated, 0.2% will be added to your grade for each mistake in which you have been determined to be the first person to report that given error. The time/date stamp of your email will be used to determine who the first to report this error was. There is no other way to get bonus credit for this course.

To receive bonus credit, take a screen shot of your computer screen. In Windows systems\(^4\), type Ctrl-Alt-PrtScreen to copy the current window contents onto the clipboard. Then open the program “Paint”, and then paste the clipboard contents into “Paint”. Save the file as a *.jpg file and email it to me at John.Penn@mail.wvu.edu. In a Mac system, Command-Shift-3 saves a copy to the Desktop, which you can then email to me.

vi. Final Numerical Score Determination:

The percentage scores for each of the exams and the homework are added together to give a weighted average as defined above. To this percentage score will be added the applicable bonus percentages for reporting errors in the database of questions.

vii. Final Letter Grade Assignment

Letter grades are assigned to your final percentage grade by the standard scale of 90-100% = A, etc. Note the Table shown to the right. There is no rounding up of final averages. In other words, 89.5% is a final grade of B. In fact, 89.9% is a final grade of B. You must achieve a final grade of 90.0% to earn an A.

One important exception to this scale is that you must earn a grade of >50% on the final exam to earn a passing grade in this course (i.e., a D or better).

<table>
<thead>
<tr>
<th>Final Numerical Score</th>
<th>Letter Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>90 – 100%</td>
<td>A</td>
</tr>
<tr>
<td>80 – 90%</td>
<td>B</td>
</tr>
<tr>
<td>70 – 80%</td>
<td>C</td>
</tr>
<tr>
<td>55 – 70%</td>
<td>D</td>
</tr>
<tr>
<td>&lt;55%</td>
<td>F</td>
</tr>
</tbody>
</table>

\(^4\) Windows or Vista operating systems
### Example Grading Scenarios

<table>
<thead>
<tr>
<th></th>
<th>Example</th>
<th>Example</th>
<th>Example</th>
<th>Example</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exam 1 (20%)</td>
<td>92%</td>
<td>92%</td>
<td>68%</td>
<td>68%</td>
<td>95%</td>
</tr>
<tr>
<td>Exam 2 (20%)</td>
<td>94%</td>
<td>94%</td>
<td>68%</td>
<td>68%</td>
<td>95%</td>
</tr>
<tr>
<td>Exam 3 (20%)</td>
<td>86%</td>
<td>86%</td>
<td>68%</td>
<td>68%</td>
<td>95%</td>
</tr>
<tr>
<td>Exam 4 (30%)</td>
<td>92%</td>
<td>92%</td>
<td>68%</td>
<td>68%</td>
<td>45%</td>
</tr>
<tr>
<td>Homework (5%)</td>
<td>85%</td>
<td>75%</td>
<td>95%</td>
<td>90%</td>
<td>100%</td>
</tr>
<tr>
<td>Class Participation</td>
<td>90%</td>
<td>75%</td>
<td>95%</td>
<td>75%</td>
<td>100%</td>
</tr>
<tr>
<td><strong>Total (100%)</strong></td>
<td>90.75%</td>
<td>89.50%</td>
<td>70.70%</td>
<td>69.45%</td>
<td>80.50%</td>
</tr>
</tbody>
</table>

**Final Grade Assigned**

- A
- B
- C
- D
- F

### 6. Academic Dishonesty

A full range of options is available to the instructor in the event of a discovery of academic dishonesty (i.e., cheating). These options are stated in the West Virginia University Code of Student Rights and Responsibilities (Section 3.5.2.6), but include dismissal from school or an unforgivable "F" for a course grade. These options will be vigorously enforced.

### 7. General Classroom Policies

**a. Attendance**

Attendance is not required, but can negatively affect one’s final letter grade in the course.

**b. Talking in Class**

Talking in class is disruptive to both the instructor and the students in the immediate area of the talking. If you have questions, please direct them to the instructor. This helps provide immediate feedback to the instructor about what is being understood by the class and what is not being understood.
c. Sleeping

Sleeping in class is done at the student's own risk.

8. Extra Help

a. From Professor Penn

The instructor is always available through cyberspace for help. Questions that are submitted to Dr. Penn by noon via email Monday through Friday will generally be answered that day. The instructor does hold "typical" office hours, but the door to his office is generally open when he is in the building. The best way to be sure to meet with me is to arrange an appointment. This is best done by looking at Prof. Penn’s on-line schedule, which can be found at http://www.google.com/calendar/embed?src=john.howard.penn%40gmail.com&ctz=Amer i ca/New_York and finding out when he is available. Suggest a time via email. Unless there are compelling circumstances, these times are usually honored and will be confirmed by return email. Alternatively, you can arrange a time with Prof. Penn immediately following a lecture session.

b. From Teaching Assistants

Additional help is also available from your laboratory teaching assistant. This assistance is offered free of charge. Ask your TA when they have office hours. In the event of problems in this line of assistance, please inform Professor Penn, so that he may be of assistance.

c. From the Student Learning Center

Another free source of assistance is from the Student Learning Center (located in Brooke Tower). Past experience indicates that the demand for assistance far exceeds the supply of available assistance.

d. From the WE_LEARN System for Organic Chemistry

Another free source of assistance is WE_LEARN system. Since accounts are being provided to you free of charge, all of the questions on the exam are in this system. If you are having trouble understanding a given concept, you can use the WE_LEARN system to get lots of practice and brush up on your learning of the topics. The assignments on WE_LEARN are structured so that each assignment is Sm2 (for the Smith second edition textbook) and then followed by a chapter number. More on this subject will be explained in the classroom.
e. From Tutors

As a last resort, help is available at a financial cost to you, the student. A list of tutors is available from the chemistry department office (217 Clark Hall). The assistance of a tutor will cost you money, the cost of which is negotiated between the tutor and the student. The effectiveness of tutoring has been shown to be primarily dependent on the student, since some students achieve great success while other students have no improvement from the same tutor.

f. Useful Websites for the Course

Information about any compound can be found simply by using Google or your favorite search engine. Or if you are looking for a boiling point for a compound, simply type the compound name and the property that you’re looking for, and you will find it. For example, try “ethanol boiling point” in your favorite search engine.

Safety information about any compound is found on the Material Safety Data Sheet (the MSDS). These sheets are legal documents which were created by the manufacturers, primarily to protect themselves. Therefore, the effects are usually overstated, since it is better to overstate dangers when it comes time to defend a lawsuit. For example, try “sodium chloride MSDS” in your favorite search engine. You will see that sodium chloride, even though it is ordinary table salt, is considered to be a dangerous chemical when administered in certain ways to your body.

A site that is highly useful for organic chemistry is the Web-sters Organic Chemistry Site (http://ep.llnl.gov/msds/orgchem/Web-sters_Org_Chem.html) Here you can find assistance in almost any area of organic chemistry. Feel free to explore.