Oakland University
College of Arts and Sciences
Department of Chemistry

Introduction to Organic and Biochemistry
CHM 201 (On-line)
WINTER 2013 CRN# – 13798

INSTRUCTOR INFORMATION
Instructor: Jennifer Tillinger, Ph.D.
Office: 293 SEB
Phone: (248) 370-2883
Fax: (248) 370-2321
E-mail: jbulgare@oakland.edu

MAILING ADDRESS
Oakland University
Department of Chemistry
Rochester, MI 48309

On-line Office Hours via Elluminate: Fridays 10:30 – 11:30 AM
Saturday 10:00 – 11:00 AM

REQUIRED ITEMS:
2. OWL – Homework access codes (Part of textbook bundle pack)
3. Other: Internet access, Scientific Calculator (no graphing calculators allowed), two(2) Scantron forms 882

COURSE DESCRIPTION:
Chemistry 201 (CHM 201) is the second semester of a one year course in general, organic and biological chemistry. This course will give a basic overview of organic chemistry and biochemistry emphasizing the physiological aspects. The topics covered are nomenclature using IUPAC rules; structure, function and reactivity of organic compounds; and protein, lipid and carbohydrate metabolism. This course in not intended for chemistry majors, premed etc.

LEARNING OUTCOMES:

1. Name compounds using IUPAC rules.
2. Identify compounds and their biological functions.
3. Know the major metabolic pathways for lipid, carbohydrate, and protein metabolism and the final products associated with these pathways.
4. Be familiar with some of the major chemical messengers, hormones and neurotransmitters, and understand how chemical messengers work.
5. Have a general understanding of the physiological relevance of the organic compounds discussed.
6. Demonstrate the capability of performing physical chemical experiments that apply the knowledge learned in the above outcomes.

COURSE FORMAT:
An on-line course is designed to accommodate students varied schedules. Therefore, the course is set-up by weeks, not individual meeting times. The week for this course will run Thursday 12:00 a.m. through Wednesday 11:59 p.m. The due dates for most assignments are at the end of
the course week. This will help you better manage the course workload with other commitments. Lectures will be available at the beginning of a week (Thursday 12:00 a.m.). OWL Homework, OWL quizzes, and Moodle exams are due by the end of a week (Wednesday 11:59 p.m.). There are two on-site scheduled meetings during the semester for the mid-term and final exam. The Mid-term Exam is scheduled for Saturday, March 2, 2013 12:00 – 2:00 p.m. in room (to be announced). The Final Exam is a comprehensive standardized exam and scheduled for Friday April 19, 2013 from 4:00 – 6:00 p.m. in room (to be announced).

We will cover about one chapter per week. See schedule below for specific dates. At this fast pace, it is imperative to NOT GET BEHIND! Each student is responsible for making sure that course work is submitted on time. Procrastination and technical difficulties don’t mix and make for a stressful situation. The lack of planning on your part does not constitute a guaranteed time extensions on my part.

**COURSE PHILOSOPHY:**
For a traditional course the average student should spend approximately two hours studying for every hour of lecture. Therefore, you should spend at a minimum two hours per day (2 hrs/day or approx 12 hrs/week) just on the lecture portion of this course. If chemistry is not one of your stronger subjects, you will need to spend more time mastering the course material. I cannot stress the importance of studying daily to be successful in this course. Chemistry is an applied science, not just memorize and regurgitate. Because of this, the questions on quizzes and exams will most likely be different than the examples provided in the lectures and the homework. Repetition is the best way to become proficient in the subject matter.

**E-MAILS & OFFICE HOURS:**
**E-mails:**
Students should use their Oakland e-mail address when communicating electronically and include CHM 201 in the e-mail subject line. This will help me identify student e-mails and allow me to more easily respond to a question because I know which course you are in. (I teach other chemistry courses). If you have something of a personal nature to discuss, please send me an e-mail directly. Do not post items of a personal nature on the Discussion Board. If you have a question that is regarding course content, then I would recommend posting your question on the Discussion Board. This will help get a more rapid response and provide a learning experience for your fellow classmates. I will normally respond within 36 hours. If I don’t, please resend your e-mail. Sometimes I have a large number of e-mails to respond to so it takes me longer to respond. Remember, the more concise your questions, the better I am able to answer your questions.
Office Hours:
In addition to the Discussion Board and e-mails, I will have on-line office hours on Fridays from 10:30 – 11:30 AM and Saturdays from 10:00 – 11:00 AM via Elluminate. The link for Elluminate is found in Moodle for this course. Attendance is not mandatory for weekly office hours, but these sessions will not be recorded. To make the most of our time together, you should come prepared with your questions ready. Depending on the number of students in attendance, I will take one question per student in the order in which they enter the virtual classroom or in order in which students raise their hand. This will allow students to use the microphone and/or camera feature of this platform. FYI, I prefer to respond using the microphone when possible. Having sound capabilities, and microphone, is to your advantage for a more effective learning experience. (Just a reminder about the microphone/camera feature, only one person can use them at a time. If you are not using the microphone/camera, please turn it off so another student can use that function.) If any student is disruptive during office hours or abuses the features in Elluminate, they will lose privileges to those features either for the rest of the session or the duration of the course depending on the circumstances.

If having your questions answered using Elluminate or those times are not convenient for you, you are welcome to stop by my office (293 SEB) if you are on campus. I have office hours MW 10:30 – 11:30 AM and TR 1:00 – 2:00 PM.

CLASS EXPECTATIONS:
1. Class Lectures:
   Power point lectures are available in Moodle for each chapter to supplement the textbook. Lecture notes for a chapter will be available at the beginning of a week

2. Class participation:
   Classroom participation is measured by the frequency of logging into the course, posting in the Discussion Board, and attending online office hours. I do not require students to attend weekly office hours or have a minimum number of postings in the “Discussion Board” (post questions or respond to postings), but each student is responsible for the information discussed or covered in all formats.

Discussion Board:
The Discussion Board, found in Moodle, is an open forum available to only students registered in this course. The Discussion Board provides students the opportunity to post questions and respond to postings with answers or additional questions in a manner that creates a classroom discussion. The responses are linked to the original posting allowing students to read the responses as if a discussion occurred during class or a peer study group. By posting your question, this will allow all in the class to benefit from your question. Others may have the same questions as you. If you are confident in the course material,
answer the question. Your response might be able to help a fellow student further understand the material. I will also respond to these postings as needed. I will monitor the content posted on the Discussion Board. If there are inappropriate postings, they will be removed and offenders will lose participation points. Post your questions and read other postings to help you learn.

3. **Homework:**

**Required Homework:**
The required homework uses the online homework system, OWL. You will need an OWL access code. The access code is included in the textbook bundle pack available at the OU bookstore or you can purchase it separately. Only the OU bundle pack OWL access code includes the e-Solutions Manual. To set-up your student OWL account, follow the directions below. Make sure you have your OWL access code available when you register. To register, you will go to [www.cengage.com/OWL](http://www.cengage.com/OWL) and click on “GOB / Allied Health Chemistry” and then “register”. Scroll down to locate our textbook General, Organic, and Biological Chemistry, 6th Edition; Stoker. Click on the textbook link, and then click on Oakland University. Select “Student Registration” for the chemistry department. You will need to select “CHM 201 - Winter 2013 Tillinger 13798” section “13798” from a list of available courses to choose from. Fill out the registration form. Please use your Oakland e-mail address when registering. You need to register in OWL by January 10, 2013.

**14-day Free Trial** – For students that are initially unable to purchase the access code for OWL and/or LabSkills, Cengage Publishing offers a 14-day free trial period. This will allow the students the ability to complete the course work on time until they are able to purchase their access code. Remember the trial period is only good for a 14-day period. You will need to acquire an access code to access the site beyond the 14-day trial period. To use the 14-day free trial, follow the directions above and then click “14-day free trial” instead of entering the registration access code.

The required assignments per chapter are the various Mastery Questions (MAS), tutorials (TUT), Visual Exercises (VIS) and Simulations (SIM). The due date for each assignment will generally coincide with the completion of each chapter as listed in the schedule.

**Recommended Homework:**
The recommended homework will be the odd problems at the end of each chapter, including Exercises & Problems and Additional Problems, unless otherwise indicated. This homework will not be collected, but will further your knowledge base and help prepare you for the chapter quizzes. There are additional problems available through the OWL that will be optional. I strongly recommend for you to do all the homework. This is one of the best ways to become proficient in the material. We will be moving at a very quick pace. You need to stay focused on the material.
4. **Quizzes & Exams:**

Each student is responsible for keeping up with the course material. Questions on exams are derived from content covered in the power point lectures as well as from the text.

**Quizzes:**

There are required quizzes in OWL for each chapter (listed as required). The quizzes through OWL have a set due date that correspond to the overall due date for that chapter. The quizzes, consist of the End-of Chapter Questions (EOC) in OWL, are timed (60 minutes) with one attempt allowed. These questions are similar to questions at the end of each chapter, but not necessarily identical. Each quiz must be completed before the date and time posted in OWL. No extensions will be given unless extenuating circumstances arise. (FYI - Do not start the quiz unless you have sufficient time to complete the quiz. Once a quiz is opened, it cannot be reopened by a student to complete at a later time.)

**Exams:**

There will be 2 unit exams, a mid-term and a final exam. The unit exams in Moodle have set due dates posted in the schedule below. The exams through Moodle will have a 48 hour block of time in which the exam will be available for you. Exams must be completed within the allotted time frame. An exam can only be accessed one time. Once an exam is opened in Moodle, it cannot be reopened by a student. The exams are also timed, 60 minutes, so make sure there are no interruptions while taking the exam that would prevent completing the exam within the allotted time. Any exam not attempted by the due date and time will be recorded as a zero grade.

There are two on campus meetings, one for the Mid-term and the other for the Final exam.

Mid-term Exam: **Saturday, March 2, 2012 12:00 – 2:00 p.m.** in room (to be announced).

The Final Exam: **Friday April 19 from 4:00 – 6:00 p.m.** in room (to be announced).

The midterm exam will cover Chapters 12 - 17. The final exam is comprehensive and will cover Chapters 12 – 26 in our text. You will need scantron form 882 for the midterm and final exams. Please be prompt, or you may not have enough time.

Make-up exams will only be granted for students who have experienced extreme circumstances and notified the instructor within 12 hours of the missed exam. The instructor is the sole judge of the circumstances that qualify as a condition sufficient for a make-up. If the instructor is not notified within 12 hours of a missed exam, then the student will not be allowed to make-up the missed exam and will receive a zero grade for that exam.

During exams the only electron device that is can be used is a non-graphing calculator. The use of cellular phones, radio/MP3 players with headsets, graphing calculators, or
any other electronic device not approved by the instructor will not be allowed. Also, hats with a brim, sunglasses or any object that conceals your eyes are not allowed during an exam. **ALL CELLULAR DEVICES MUST BE TURNED OFF AND PLACED ON THE FRONT DESK DURING ANY ASSESSMENT.** Once an exam begins, you will not be allowed to leave the room and return to complete your exam.

5. **Grading:**
Students grades are based on the weighted average from Exams, quizzes, lab reports, participation and homework as defined below. Final numeric grades will be determined as follows: A 90% of the maximum points will be assigned a 4.0 grade. A 50% score of the maximum points will be assigned a 1.0 grade, with a linear grade scale between. Students with points totaling less than 50% of the total points possible will receive a 0.0 grade. Note: Each item is weighted differently when calculating your final grade, therefore your course percentage in Moodle will not reflect your true percentage in the course.

<table>
<thead>
<tr>
<th>Component</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participation</td>
<td>10%</td>
</tr>
<tr>
<td>Moodle unit exams</td>
<td>20%</td>
</tr>
<tr>
<td>OWL quizzes</td>
<td>10%</td>
</tr>
<tr>
<td>Online homework (OWL)</td>
<td>10%</td>
</tr>
<tr>
<td>Midterm</td>
<td>25%</td>
</tr>
<tr>
<td>Comprehensive final exam</td>
<td>25%</td>
</tr>
</tbody>
</table>

6. **Academic Conduct:**
Students are expected to uphold the academic standards set by Oakland University. The work submitted by any student should be their own work. Students suspected of academic misconduct (Examples of academic misconduct are looking off another students exam, plagiarism, changing answers on your exam sheet after grading or lab reports, the use of materials not authorized by the instructor, obtaining copies of exam questions prior to the exam date, simultaneously completing a graded assignment from the same computer as another individual, or another student taking an exam for you), will be reported to the academic conduct committee. Students found guilty of academic misconduct will receive a zero grade for this course. For further details see Academic Conduct Policies section in the 2012 – 2013 Undergraduate Catalog or on line at [http://catalog.oakland.edu.](http://catalog.oakland.edu)
## Tentative Schedule

Dates are subject to Change

<table>
<thead>
<tr>
<th>Week</th>
<th>Dates</th>
<th>Chapter</th>
<th>OWL due dates (due at 11:59 PM)</th>
<th>Exam dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>#1</td>
<td>1/3 – 1/9</td>
<td><strong>Chapter 12</strong> – Saturated Hydrocarbons</td>
<td>1/16/12</td>
<td></td>
</tr>
<tr>
<td>#2</td>
<td>1/10 – 1/16</td>
<td><strong>Chapter 13</strong> – Unsaturated Hydrocarbons</td>
<td>1/23/12</td>
<td></td>
</tr>
<tr>
<td>#3</td>
<td>1/17 - 1/23</td>
<td><strong>Chapter 14</strong> – Alcohols, Phenols &amp; Ethers</td>
<td>1/31/12</td>
<td></td>
</tr>
<tr>
<td>#4</td>
<td>1/24 – 1/30</td>
<td><strong>Chapter 15</strong> – Aldehydes &amp; Ketones</td>
<td>2/6/12</td>
<td></td>
</tr>
<tr>
<td>#5</td>
<td>1/31 – 2/6</td>
<td><strong>Chapter 16</strong> – Carboxylic Acids, Esters, &amp; Other Acid Derivatives</td>
<td>2/13/12</td>
<td>E#1 2/4 – 2/6 (Ch. 12 – 14)</td>
</tr>
<tr>
<td>#6</td>
<td>2/6 – 2/13</td>
<td><strong>Chapter 17</strong> – Amines &amp; Amides</td>
<td>2/27/12</td>
<td></td>
</tr>
<tr>
<td>#7</td>
<td>2/14 – 2/27</td>
<td><strong>Chapter 18</strong> – Carbohydrates</td>
<td>3/6/12</td>
<td></td>
</tr>
<tr>
<td>#8</td>
<td>2/28 – 3/6</td>
<td><strong>Chapter 19</strong> – Lipids</td>
<td>3/13/12</td>
<td>Midterm 3/2/13 (Ch. 12 – 17)</td>
</tr>
<tr>
<td>#9</td>
<td>3/7 – 3/13</td>
<td><strong>Chapter 20</strong> – Proteins</td>
<td>3/20/12</td>
<td></td>
</tr>
<tr>
<td>#10</td>
<td>3/14 – 3/20</td>
<td><strong>Chapter 21</strong> – Enzymes &amp; Vitamins</td>
<td>3/20/12</td>
<td></td>
</tr>
<tr>
<td>#12</td>
<td>3/28 – 4/3</td>
<td><strong>Chapter 23</strong> – Biochemical Energy Production</td>
<td>4/3/12</td>
<td>E#2 3/25 – 3/27 (Ch. 18 – 21)</td>
</tr>
<tr>
<td>#13</td>
<td>4/4 – 4/10</td>
<td><strong>Chapter 24</strong> – Carbohydrate Metabolism</td>
<td>4/10/12</td>
<td></td>
</tr>
<tr>
<td>#14</td>
<td>4/11 – 4/17</td>
<td><strong>Chapter 25</strong> – Lipid Metabolism</td>
<td>4/17/12</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Chapter 26</strong> – Protein Metabolism</td>
<td>4/17/12</td>
<td></td>
</tr>
</tbody>
</table>

### Mid-term Exam: Saturday, March 2, 2013 12:00 – 2:00 p.m. Location TBA

### Final Exam: Friday April 19 from 4:00 – 6:00 p.m. Location TBA

January 16, 2013 is the last day of late registration.
March 14, 2013 is the last day for an official withdrawal.