CHEMISTRY 352 – BIOCHEMISTRY part 2

SPRING 2015

SCHEDULE AND COURSE POLICIES

Instructor: Dr. Marcello Forconi  Phone: 843-953-3616
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Time and Location: M/W/F, 10:00-10:50 am SSM 127

Office hours: M, 11:00 am -1:00 pm; W: 11:00 am -12:00 pm; or by appointment.

2) Sapling Learning Online Homework. You can purchase this at the bookstore or online (link below).

Prerequisite: CHEM 351.

Attendance: Attendance at all scheduled classes, tests and the final exam is mandatory. Extreme circumstances will be excused by providing the appropriate documentation.

Study Hints:
You should read the chapters indicated in the schedule below before they are covered in class. Read with pencil and paper being sure to outline the material and work the end of chapter problems to test your grasp of the material. Notes will also be provided on OAKS.

<table>
<thead>
<tr>
<th>Tentative schedule</th>
<th>Chapter</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/12-14</td>
<td>10</td>
<td>Introduction to Metabolism</td>
</tr>
<tr>
<td>1/16-1/26</td>
<td>11</td>
<td>Glycolysis</td>
</tr>
<tr>
<td>1/28-2/4</td>
<td>12</td>
<td>Gluconeogenesis, the Pentose Phosphate Pathway, and Glycogen Metabolism</td>
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<tr>
<td>2/9-2/16</td>
<td>13</td>
<td>The Citric Acid Cycle</td>
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<tr>
<td>2/18-2/27</td>
<td>14</td>
<td>Electron Transport and ATP Synthesis</td>
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<tr>
<td>3/11-3/18</td>
<td>15</td>
<td>Photosynthesis</td>
</tr>
<tr>
<td>3/20-3/30</td>
<td>16</td>
<td>Lipid Metabolism</td>
</tr>
<tr>
<td>4/3-4/13</td>
<td>17</td>
<td>Amino Acid Metabolism</td>
</tr>
<tr>
<td>4/15-4/22</td>
<td>18</td>
<td>Nucleotide Metabolism</td>
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</tbody>
</table>
Grading:

There will be **four tests** covering all the new material and all previously covered material, i.e. tests are cumulative. The **final exam** is also cumulative. Tentative test dates are below; however, exact test dates will be announced at least one week in advance.

<table>
<thead>
<tr>
<th>Test</th>
<th>Day/Date</th>
<th>Chapters</th>
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<tbody>
<tr>
<td>1</td>
<td>Friday, February 6</td>
<td>10,11, 12</td>
</tr>
<tr>
<td>2</td>
<td>Monday, March 9</td>
<td>13, 14</td>
</tr>
<tr>
<td>3</td>
<td>Wednesday, April 1</td>
<td>15, 16</td>
</tr>
<tr>
<td>4</td>
<td>Friday, April 24</td>
<td>17, 18</td>
</tr>
<tr>
<td>Final Exam</td>
<td>Monday, May 4, 8-11</td>
<td></td>
</tr>
</tbody>
</table>

Each test will count **7.5%** and the final exam **30% of the course grade**. No late or make-up test will be given. In the event of a **justified** absence from a test, the final exam will replace the grade of zero that you receive for that missed test. Unjustified absences will be counted as zero and will not be replaced in any case. **If (and only if) you have taken all of your tests, your exam grade will replace the lowest test grade if doing so will improve your average.**

In-class quizzes will be periodically given, and will require the use of a mobile device such as mobile phone, tablet, or computer, and access the following link PollEv.com/marcelloforc171. Details will be given in class. **Some of these quizzes will count 5% of your final grade.**

Online homework will count **25% of the course grade**. You can purchase the access to online homework directly at the bookstore or through Sapling http://saplinglearning.com. Due dates and times for the online homework will be announced in class. Most homework assignments will be due on the next class period.

Finally, **bioinformatics and Pymol assignments will count 10% of the course grade.** A tutorial is available on OAKS. Pymol can be downloaded from www.pymol.org or can be used from the computers in the computer labs. The nature of the assignments will be periodically discussed in the class.

**Summary of grading**

- Tests 7.5% x 4 = 30%
- Quizzes 5.0% x 1 = 5%
- Online Homework 25% x 1 = 25%
- Bioinformatics 10% x 1 = 10%
- Final exam 30% x 1 = 30%
In-class course-instructor evaluations.
On the last lecture period, about 15 minutes will be set aside for the students to complete course-instructor evaluations directly in the classroom. Please complete yours before or during that period.

Course Objectives:
The successful student is expected to:

- To illustrate the chemical logic inherent in metabolism
- To compare and contrast the types of organic reactions that facilitate the breakdown and building of biological molecules
- To evaluate how errors in metabolism lead to human disease
- To recognize how metabolic pathways are regulated

Academic Dishonesty:
Lying, cheating, attempted cheating, and plagiarism are violations of our Honor Code that, when identified, are investigated. Each incident will be examined to determine the degree of deception involved.

Incidents where the instructor determines the student’s actions are related more to a
misunderstanding will handled by the instructor. A written intervention designed to help prevent the student from repeating the error will be given to the student. The intervention, submitted by form and signed both by the instructor and the student, will be forwarded to the Dean of Students and placed in the student’s file.

Cases of suspected academic dishonesty will be reported directly by the instructor and/or others having knowledge of the incident to the Dean of Students. A student found responsible by the Honor Board for academic dishonesty will receive a XF in the course, indicating failure of the course due to academic dishonesty. This grade will appear on the student’s transcript for two years after which the student may petition for the X to be expunged. The F is permanent. The student may also be placed on disciplinary probation, suspended (temporary removal) or expelled (permanent removal) from the College by the Honor Board.

Students should be aware that unauthorized collaboration—working together without permission— is a form of cheating. Unless the instructor specifies that students can work together on an assignment, quiz and/or test, no collaboration during the completion of the assignment is permitted. Other forms of cheating include possessing or using an unauthorized study aid (which could include accessing information via a cell phone or computer), copying from others’ exams, fabricating data, and giving unauthorized assistance.

Research conducted and/or papers written for other classes cannot be used in whole or in part for any assignment in this class without obtaining prior permission from the instructor.

Students can find the complete Honor Code and all related processes in the Student Handbook at http://studentaffairs.cofc.edu/honor-system/studenthandbook/index.php

Disabilities:

If there is a student in this class who has a documented disability and has been approved to receive accommodations through SNAP Services, please feel free to come and discuss this with me.