Course Policies and Syllabus
BI 336-Cell Biology Spring 2016

Time and Room:

- **Lecture:** 9:45 - 11:35 TR, CLSB 1A001
- We will run with one break: 9:45-10:35, break (10 min.), 10:45-11:35. **These are approximate times.**
- **Recitation:** 2:00-2:50 R, CH 71
- **Final:** Thursday, June 9th, 8:00-9:50 AM

Instructor/Office Hours:

- **Jeffrey Singer, Ph.D.,** Associate Professor, Biology Department, PSU
- **Office:** CLSB 3N032
- **Office Hours:** M, W 3:00 PM-4:00 PM and by appointment. **NOTE: for this you must go to this room: CLSB 5S021 for this time only. Any other office hours will be in 3N032.**
- **E-mail:** jsinger@pdx.edu  **Please do not use D2L to contact me!**
- **Tel:** 503-725-8742

TAS:

Brittney Davidge  bdavidge@pdx.edu
Kimberly Sheffield  kks@pdx.edu

Textbook:

1) Alberts et al., *Molecular Biology of the Cell*, 6th Edition, 2014 Garland Science. HARDBACK • 978-0-8153-4432-2 - LOOSELEAF • 978-0-8153-4524-4. This is required for both 334 and 336. This is the **required** text and is the book the reading assignments are referring to.

2) **i>clicker**, sold at bookstore, we will use these for quizzes and in class questions. Note: **THESE ARE REQUIRED!** You need to have them on the first day! Also, please make sure you register these online! Go to the iclicker website and select registration. Can use iclicker, iclicker + or iclicker 2.

Prerequisites (note, these are required, not suggested):

1) Principles of Biology (FULL YEAR)
2) General Chemistry
3) Molecular Biology BI 334

*Organic Chemistry recommended but not required. Biochemistry is helpful but not required.

Subject Matter and Goals:
The overall goal of this course is to give you an idea of what cells are and what they do. This goal will be accomplished by:

1) Examining individual cellular components
2) Considering how cellular components work together inside the cell
3) Looking at how cells adapt to changing environments both as individuals and as parts of cellular communities (tissues, organs etc.).

My hope is that this course will give you a solid foundation on cellular form and function for future biology courses. If you leave this course with a basic idea of what cells are, what cells do and how they accomplish the variety of tasks they are responsible for, then I have done my job.

D2L:

- Lecture presentations
- Supplemental reading materials
- Syllabus updates
- Topics for recitation

Evaluation:

- Daily quizzes during class, (1/5 of grade), using clickers.
- Two Midterms (1/5 of Grade each)-April 12th and May 10th in class.
- Group work and quiz during recitation-1/5 of grade.
- One final (1/5 of Grade). June 9th, Thursday 8:00-9:50 AM.

Notes on clickers and quizzes:

- We will try to use code AB for the entire quarter!
- I will ask a few questions sometime during the lecture about the material covered in the previous lecture topic. Please do not communicate with others during the quiz. You are welcome to look at notes to answer these; you will have 90 seconds to answer each one using your clicker. These will comprise 20% of your grade, thus obtaining and registering your clicker is very important.
- Note, these are worth 75 points total. There will be more than 75 questions. The extras are there for those who must miss a few (sick, snow, etc.). Thus, there are no makeups.
- I will also ask questions that are not graded using the clickers. This will serve as a method to determine how well I am getting the material across to the class.
- Please note: You are responsible for making sure the battery is good in your clicker, making sure you know how to use them (instructions are printed on them) and know how to change to other frequencies if asked to. Make sure that D2L has your correct email address as well.

Makeup/Cheating:

- Makeup exams are only given under extreme circumstances, e.g birth/death in family or illness that requires medical attention (note from medical professional required).
- The instructor will determine the format and date of the makeup examination.
- Cheating on any examination or quiz will result in a zero.

Grade determination:
Grades for this class will be based on your performance on 3 exams, group work in recitation and daily quizzes. There will be 2 hourly exams and a final exam. Each exam is worth 75 points, recitation is worth 75 points and the quizzes will be worth a total of 75 points. Your final grade will be based on the total number of points earned for the quarter:

A = 90% of the top score in the class
B = 80% of the top score
C = 70% of the top score
D = 60% of the top score
F = 59% or lower of the top score

Regrade Policy: Must be requested in writing within a week of return of examination (posting of key). Note: Entire exam will be regraded and the grade may go down.

Exam policies:

- Exams will likely involve multiple-choice, written short-answer, and drawing-labeling diagrams. For multiple-choice exams, students will need to provide a scantron sheet. Be sure to bring a form SC982-E* scantron sheet to every exam. *This is a large form, not the small one and has new features; I have uploaded a PDF of this form for you to see.
- There are NO make-up exams (see below). It is your obligation to be present to take the scheduled exams. Please, do not take this course if you cannot be present for the exams at the scheduled times. This is not negotiable. The only acceptable reasons for missing an exam are a death in the family, serious illness verified by a doctor’s note, or a required University sanctioned event.
- If you take the test in the testing center you must get an appointment for the correct day, take the test when the class takes it, and inform me at least one week ahead of time for each test!!!!!!
- Also, you are responsible for keeping track of time during the exams!!

Statement regarding recording and distribution of course sessions:

- Students who wish to make an auditory or visual recording of any portion of the class must speak with the instructor ahead of time.
- Any such recording is for personal use only. It may not be shared, copied, uploaded to the Internet, and/or distributed without written permission from the instructor as well as any student who appears or is heard in the recording.

Statement regarding students with disabilities:

- Accommodations are collaborative efforts between students, faculty and the Disability Resource Center (DRC).
- Students with accommodations approved through the DRC are responsible for contacting the faculty member in charge of the course prior to or during the first week of the term to discuss accommodations.
- Students who believe they are eligible for accommodations but who have not yet obtained approval through the DRC should contact the DRC immediately at 503-725-4150.

Safe Campus Module:

- If you have not done so already, please complete the Safe Campus Module in d2l. The module should take approximately 30 to 40 minutes to complete and contains important information and resources. If you or someone you know has been harassed or assaulted, you can find the
appropriate resources on PSU’s Enrollment Management & Student Affairs: Sexual Prevention & Response website at: http://www.pdx.edu/sexual-assault/. PSU’s Student Code of Conduct makes it clear that violence and harassment based on sex and gender are strictly prohibited and offenses are subject to the full realm of sanctions, up to and including suspension and expulsion.

Examination etiquette:

• I take learning very seriously and violation of the student conduct code will not be tolerated. A copy of the student conduct code is provided by PSU at the following web address: http://www.pdx.edu/dos/psu-student-code-conduct.

• This class and the tests will be moderately difficult so be prepared for the exam when you arrive. To ensure a fair testing environment no one will be allowed to leave the lecture hall during the exam until they turn in their exam for final grading.

• **Remember:** These are closed book exams! Also, *all* portable electronic devices e.g. phones, pagers, calculators, mp3 players, GPS units, etc…must be stowed safely **WITHIN** your book bag or your pockets during the exam. Headphones are not allowed. No exceptions.

• If you have a medical problem or learning disability that may interfere with adhering to these rules and you wish to arrange for special accommodations, you must see me at least one week before the first exam. For people taking the exam at the testing center make sure you book times early and I always prefer you take the exam **at the same time** as the rest of the class (start time).

Lecture Presentations:

Lectures will be available online using D2L. These are an outline of what was covered in lecture and are provided to assist you. **These files should not be considered a complete coverage of the lecture materials and are certainly not an acceptable replacement for attending lectures. In addition, these are not notes, they are merely an outline of what I discussed in class. You should take your own notes.**

Recitation:

During recitation we will do group work involving discussion and solving of problems in cell biology. This will be like a dry lab on topics from the week. We will also have a quiz each week. This work (quiz and discussion) will be worth 1/5 of your total grade, a total of 80 points (8 points per quiz, one extra in case you are sick or need to miss one).

Incompletes:

I **will** follow the university policies. Those policies are shown here: http://www.pdx.edu/registration/grading-system/#/?section=incompletegradeI Please review these.
<table>
<thead>
<tr>
<th>Date</th>
<th>Lecture Topic</th>
<th>Reading</th>
<th>Recitation topic</th>
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<tbody>
<tr>
<td><strong>Part 1: Cellular Components and Molecular Trafficking</strong></td>
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<tr>
<td>Mar 29</td>
<td><strong>Topic 1:</strong> Introduction and Membranes I-Structure and <strong>Topic 2:</strong> Membranes II-Proteins</td>
<td>Chapter 10</td>
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<td>Mar 31</td>
<td><strong>Topic 3:</strong> Membrane transport I-Transporters and <strong>Topic 4:</strong> Membrane transport II-Ion channels and the electrical properties of membranes</td>
<td>Chapter 11</td>
<td>Proteins in membranes</td>
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<tr>
<td>Apr 5</td>
<td><strong>Topic 5:</strong> Intercellular compartments and transport of molecules between nucleus and cytosol and</td>
<td>Chapter 12</td>
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<td>Apr 7</td>
<td><strong>Topic 6:</strong> Transport of proteins into organelles</td>
<td>Chapter 12</td>
<td>Transport</td>
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<td>April 12</td>
<td><strong>Midterm 1</strong></td>
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<td>Apr 14</td>
<td><strong>Topic 7:</strong> The ER I-import and <strong>Topic 8:</strong> The ER II-folding, quality control and lipids</td>
<td>Chapter 12</td>
<td>ER and folding</td>
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<td>Apr 19</td>
<td><strong>Topic 9:</strong> Trafficking I-Compartments and <strong>Topic 10:</strong> Trafficking II-Golgi</td>
<td>Chapter 13</td>
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<td>Apr 21</td>
<td><strong>Topic 11:</strong> Trafficking III-Endo and Exocytosis</td>
<td>Chapters 13</td>
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<td><strong>Part 2: Cellular Energetics</strong></td>
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<td>Apr 21</td>
<td><strong>Topic 12:</strong> Energy conversion I-Electron transport</td>
<td>Chapter 14</td>
<td>Trafficking</td>
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<td>April 26</td>
<td><strong>Topic 13:</strong> Energy conversion II-Photosynthesis and <strong>Topic 14:</strong> Plastid and mitochondrial genetics</td>
<td>Chapter 14</td>
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<td><strong>Part 3: How Cellular Components Work Together</strong></td>
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<td>Apr 28</td>
<td><strong>Topic 15:</strong> Cell Communication and <strong>Topic 16:</strong> Signaling Mechanisms I-G protein coupled cell surface receptors</td>
<td>Chapter 15</td>
<td>GPCRs</td>
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<td>May 3</td>
<td><strong>Topic 17:</strong> Signaling Mechanisms II-Enzyme coupled cell surface receptors and</td>
<td>Chapter 15</td>
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<td>May 5</td>
<td><strong>Topic 18:</strong> Signaling Mechanisms III-Latent signaling molecules and plant signaling</td>
<td>Chapter 15</td>
<td>Signaling Mechanisms</td>
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<td>May 10</td>
<td><strong>Midterm 2</strong></td>
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<td>May 12</td>
<td><strong>Topic 19:</strong> The cytoskeleton I-Filaments and Actin and <strong>Topic 20:</strong> The cytoskeleton II-Myosins and Microtubules</td>
<td>Chapter 16</td>
<td>Cytoskeleton</td>
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<td>May 17</td>
<td><strong>Topic 21:</strong> The cytoskeleton III-Intermediate filaments and cell polarization</td>
<td>Chapter 16</td>
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<td>May 19</td>
<td><strong>Topic 22:</strong> The cell cycle I-Regulation and Phases I</td>
<td>Chapter 17</td>
<td>Cell Cycle</td>
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<td>May 24</td>
<td><strong>Topic 23:</strong> The cell cycle II-Phases II and <strong>Topic 24:</strong> Apoptosis</td>
<td>Chapters 17-18</td>
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<td><strong>Part 4: How Cells Interact And Respond To Their Environment</strong></td>
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<td>May 26</td>
<td><strong>Topic 25:</strong> Cell interactions I-cell-cell interactions</td>
<td>Chapter 19</td>
<td>Adhesion</td>
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<td>May 31</td>
<td><strong>Topic 26:</strong> Cell interactions II-cell-matrix interactions</td>
<td>Chapter 19</td>
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<td>Jun 2</td>
<td><strong>Topic 27:</strong> Nerve Cells and <strong>Topic 28:</strong> Stem Cells</td>
<td>Chapters 21 and 22</td>
<td>Special Topics</td>
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<td>Jun 9</td>
<td><strong>Final Exam 08:00-9:50 AM Thursday</strong></td>
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Note: The above schedule is subject to change, except for exam dates, which are fixed.

Last Updated: March 21, 2016