

# **BIOSCI 0100**

## **PREPARATION FOR BIOLOGY**

### **FALL TERM 2016 SYLLABUS**

#### **Instructor**

Alison Slinskey Legg, Ph.D.

A253 Langley Hall, (412) 624-8286

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Office Hours: Mondays 2:00pm-4:00pm, Wednesdays 11:00am – 12:00pm, , room A253 Langley Hall, or by appointment.

#### **Recitation Instructor**

Becky Gonda, Ph.D.

E-mail: Reg11@pitt.edu

Office Hours: Tuesdays 2:00pm - 3:00pm, Thursdays 2:00pm – 4:00pm, room A254 Langley Hall, or by appointment.

#### **Lecture**

Monday/Wednesday 1:00-1:50 pm 241 Crawford Hall (class#11183)

#### **Recitation**

Friday 10:00-11:50 am 241 Crawford Hall (class#11372)

Friday 1:00-2:50 pm 214 Langley Hall (class#11184)

#### **Textbook and Supplemental Materials**

##### **Required:**

Biological Science, Fifth Edition by Scott Freeman. Published by Benjamin Cummings.

#### **Course Objectives**

The goal of this course is to provide students with a foundation in biology. This course is intended for students who have not taken high school biology in the past 5 years, or who feel that their biology background is weak, yet intend to take additional biology courses. We will concentrate on a subset of topics covered in Foundations of Biology I and II (BIOSCI 150, 160), including a review of chemistry as it applies to biology, the structure and function of macromolecules, the basic structure of cells, energy and cellular respiration, introduction to genetics and molecular biology, and if time permits development.

## Lecture and Exam Schedule

The schedule this course is on page 4. Please note the dates of the mid-term and final examinations to avoid any future scheduling conflicts. Both **Mid-Term Examinations** will be given during the regular class meetings. The **Final Examination** will be in room 241 Crawford Hall **Friday December 16 from 2:00 to 3:50pm**. The final examination will be comprehensive in nature. Please note that the final exam will begin promptly at 2:00pm. If you have to travel to campus allow sufficient time to ensure that you arrive by the time the exam begins.

## Recitation

The recitation for BIOSCI 0100 is an important component of this course. During the term, the instructor will cover new material, review lecture topics, assign homework, answer questions, lead the group in solving problems, and review exams. **Your attendance in recitation is required.**

## Final Grade

Your final grade will be determined on the basis of your total points earned during the semester. There will be two mid-term exams, each 50 minutes, scheduled during class meetings (see page 4). Additionally, there will be a cumulative (comprehensive) final exam (the Final Examination will be in room 241 Crawford Hall) **Friday December 16 from 2:00 to 3:50pm**. The midterms are worth 50 points each and the final is worth 75 points. Homework and participation in lecture and recitation is worth a total of 50 points.

## Missed Exams

There will be **NO MAKE-UP MIDTERM EXAMS**. If you miss a mid-term exam due to an excused emergency absence, your final grade will be based on the total points earned on the other mid-terms and the final exam. If you miss an exam due to an emergency (death in the immediate family, serious injury, or illness), you must submit, in writing, to Dr. Slinsky Legg, your request for an excused absence. Please use the following guidelines when preparing your written request:

- Indicate your name, the nature of the emergency, and the date of the examination that you missed.
- Your request must be detailed, typed and signed in ink. It must be given to Dr. Slinsky Legg no later than 1 week after the missed exam.
- If you missed an exam due to a medical condition, you must include documentation. At the minimum, you must submit a signed letter from your physician.

Failure to comply with these guidelines could result in a zero grade being recorded for the missed exam. No one will be excused from more than one missed exam. If you miss more than one exam, you must contact your academic advisor or the CAS Dean's office to discuss your possible options.

## G Grades

Students who wish to petition for a G grade must submit to Dr. Slinsky Legg, in writing, a specific request for this grade change documenting your reason(s). You will be required to make arrangements in person, with the instructor, for the specific tasks you must complete to remove the G grade. Remember that G grades, according to CAS guidelines, are to be given only when students who have been attending a course and have been making regular progress are prevented by circumstances beyond their control from completing the course after it is too late to withdraw (University of Pittsburgh Undergraduate Bulletin). If you miss the final and have a valid excuse, you may receive a G grade, but only after the excuse is documented and arrangements to finish the course work are finalized with the instructor.

### **Academic Integrity**

Cheating/plagiarism will not be tolerated. Students suspected of violating the University of Pittsburgh Policy on Academic Integrity, noted below, will be required to participate in the outlined procedural process as initiated by the instructor. A minimum sanction of a zero score for the quiz, exam or paper will be imposed. (For the full Academic Integrity policy, go to [www.provost.pitt.edu/info/ai1.html](http://www.provost.pitt.edu/info/ai1.html).)

### **Students with Disabilities**

If you have a disability for which you are or may be requesting an accommodation, you are encouraged to contact both your instructor and the Office of Disability Resources and Services, 140 William Pitt Union, 412-648-7890/412-624-3346 (Fax), as early as possible in the term. Disability Resources and Services will verify your disability and determine reasonable accommodations for this course. For more information, visit [www.studentaffairs.pitt.edu/drsabout](http://www.studentaffairs.pitt.edu/drsabout).

### **Email Communication**

Each student is issued a University e-mail address (username@pitt.edu) upon admittance. This e-mail address may be used by the University for official communication with students. Students are expected to read e-mail sent to this account on a regular basis. Failure to read and react to University communications in a timely manner does not absolve the student from knowing and complying with the content of the communications. The University provides an e-mail forwarding service that allows students to read their e-mail via other service providers (e.g., Hotmail, AOL, Yahoo). Students that choose to forward their e-mail from their pitt.edu address to another address do so at their own risk. If e-mail is lost as a result of forwarding, it does not absolve the student from responding to official communications sent to their University e-mail address. To forward e-mail sent to your University account, go to <http://accounts.pitt.edu>, log into your account, click on **Edit Forwarding Addresses**, and follow the instructions on the page. Be sure to log out of your account when you have finished. (For the full E-mail Communication Policy, go to [www.bc.pitt.edu/policies/policy/09/09-10-01.html](http://www.bc.pitt.edu/policies/policy/09/09-10-01.html).)

### **Office Hours**

The posting of office hours on the office door is University policy, and the responsibility of the faculty member as a courtesy and convenience to students. (Source: [www.pitt.edu/~provost/ch3\\_off\\_hrs.htm](http://www.pitt.edu/~provost/ch3_off_hrs.htm)). Most administrative offices are open from 8:30 a.m. to 5:00 p.m., Monday through Friday. A few offices, such as the College of General Studies, have extended hours. In addition, according to the *Academic Integrity Guidelines*, under *I. Faculty Obligations, Point 2*, faculty are "To be available at reasonable times for appointments with students, and to keep such appointments." (Source: [www.as.pitt.edu/faculty/policy/integrity.html](http://www.as.pitt.edu/faculty/policy/integrity.html)) I encourage students to attend office hours. If those times are in conflict with another class or activity, I am happy to schedule individual appointments. Please arrange meeting times by email.

| Date         | Chapter | Topic   |
|--------------|---------|---|
| 8/29         | 2       | Course Introduction<br>The Chemistry of life                            |
| 8/31         | 2       | Chemical Bonds/Water  |
| 9/5          |         | <b>No Class-Labor Day</b>   |
| 9/7          | 2       | Carbon/Chemical Functional Groups                                       |
| <b>9/9</b>   |         | <i>Add/Drop Period Ends</i>   |
| 9/12         | 3       | Macromolecules/Proteins   |
| 9/14         | 3       | Proteins  |
| 9/19         | 4       | Nucleic Acids   |
| 9/21         | 5/6     | Carbohydrates/Lipids  |
| 9/26         | 6       | Membranes   |
| 9/28         | 7       | The Cell - Organelles   |
| 10/3         | 7       | The Cell /Cytoskeleton  |
| 10/5         |         | <b>MID-TERM EXAM 1</b>  |
| 10/10        | 8       | Energy and Enzymes  |
| 10/12        | 9       | Glycolysis  |
| 10/17        |         | FALL BREAK NO CLASS   |
| 10/18        | 9       | Cellular Respiration ( <b>Tuesday</b> )                                 |
| 10/19        | 9       | Cellular Respiration  |
| 10/24        | 11      | Cell:Cell Interactions /Signal Transduction                             |
| 10/26        | 12      | The Cell Cycle/Mitosis  |
| <b>10/28</b> |         | <i>Deadline to submit monitored withdrawal forms to Dean's Office</i>   |
| 10/31        | 13      | Meiosis /Nondisjunction-Human Genetic Disease                           |
| 11/2         | 14      | Genetics Overview /Mendelian  |
| 11/7         | 14      | Genetics, The Chromosome Theory of Inheritance                          |
| 11/9         |         | <b>MID-TERM EXAM 2</b>  |
| 11/14        | 15      | DNA Replication   |
| 11/16        | 16      | The Central Dogma   |
| 11/21        | 17      | Anatomy of a Gene   |
| 11/23        |         | <b>No Class – Thanksgiving Break</b>                                    |
| 11/28        | 17      | Transcription, Post-Transcriptional Modifications                       |
| 11/30        | 17      | Translation   |
| 12/5         | 16/19   | Control of Eukaryotic Gene Expression                                   |
| 12/7         | 22      | Development and Differential Gene Expression                            |
| <b>12/16</b> |         | <b>FINAL EXAM 241 Crawford Friday December 16 from 2:00pm to 3:50pm</b> |
|              |         |   |