BIOSC 0805: THE HUMAN BODY
Department of Biological Sciences
University of Pittsburgh

Faculty

Zuzana Swigonova, Ph.D.
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Office hours
Office hours: Mondays 10:00 – 11:30 AM, 356 Langley Hall
Wednesdays 1:00 – 2:30 PM, 356 Langley Hall
Office hours by appointment can be arranged by email.

Lecture Time
Tuesdays & Thursdays, 2:30 – 3:45 PM, 169 Crawford Hall

Course objectives
This is a course in human biology and physiology for students not majoring in biology. The goal is to provide students with an understanding of fundamental principles of life with an emphasis on the human body. We will start by covering basic biochemistry and cell biology and then move on to the structure and function of human organ systems. An essential part of the course is a discussion of health issues of general interest, such as infectious, autoimmune and neurodegenerative diseases; asthma and allergy; nutrition and health; stem cells research and cloning; and methods of contraception and reproductive technologies.

Textbook

• Biology. A guide to the natural world, by David Krogh. Pearson, Benjamin Cummings Publishing Company. (ISBN#:0-558-65495-9). This is custom made textbook that includes only the parts of the original edition that are covered in the course. It is available in the Pitt bookstore.
• You can also use the full 4th or 3rd edition, however, be aware that the chapters in earlier editions are rearranged in a different order and may be lacking some parts included in the later edition. One copy of the 4th edition will be available on reserve in the Langley Library throughout the semester.

Office hours
I hold my office hours in my office, 356 Langley Hall. During office hours I am present and available to you to help you with the course material and other course related issues. I also have open door policy, meaning that if my door is open, you can come and give it a try. If I cannot give you my full attention, I will tell you and we can arrange another time to meet. Appointments can also be arranged by email. I do provide more office hours the week prior to exams for potential reviews – make sure to check CourseWeb for the time announcements.

UTAs
University teaching assistants usually help in this course. They hold office hours, help students with the covered material, and may teach brief workshops under the direction of the instructor. UTAs are biology major students that passed Biosc150: Biology Foundations with letter A and represent additional resource to students in need of additional reviews.

CourseWeb
I will be using CourseWeb to post lecture notes, announcements, sample exams, answer keys, and other additional material: http://courseweb.pitt.edu. After log in on
the main page you will have access to your “My CourseWeb” page where you find
the link to the class. If you need help contact computer help desk at 412-624-HELP.

**Weekly assignments**
Weekly assignments include reading of background chapters as indicated in the
course schedule. There will be additional readings based on the topics covered, which
will be announced in class and posted on CourseWeb.

**Papers/projects**
Three homework assignments are scheduled as indicated on the course schedule.
These will target the application of basic concepts to the understanding of human
health and diseases. They also represent reviews of the covered material.
In the second half of the course you will work on an independent investigation of a
selected human disease. The assessment is based on evaluation of the application of
background knowledge to the description of the disease and its underlying causes,
evaluation of potential treatment, and prediction of the outcome.

**Exams**
There will be three midterm exams and a final exam. Please note the dates on the
accompanying schedule below. The midterm exams will include material covered in
the preceding lectures while the final will be cumulative.

*There are no make up exams or extra credit opportunities in this class!*

Please note that you are expected to show up to each exam on time. Late arrivals will
be given the exam during the time that remains for the designated examination
period. If you commute to the campus, please allow sufficient time to ensure that you
arrive by the time the exam begins.

**Other Assignments**
Classes are run in the format of lectures and short workshops. During workshops
students may be required to finish work and hand it in during the same class period
for grading. Sometimes homework may be given when extra time is required to
complete the work. Only some of the assignments (randomly selected) will be graded
(while others will not).

**Grading**
The final grade will consist of the three homework assignments and additional graded
work (25%), the three mid-term examinations (40%), the report on human disease
(10%), and the final examination (25%).

Your final letter grade will be determined by a curve based on the class mean of the
point totals collected in the course. After the final exam, class average will be
-calculated as arithmetic mean of points collected per each student. The distance of
the class average and the 75% of the maximum possible points earned will be used to
adjust the class average to meet the 75% of the total. Therefore, it is impossible to
predict which letter grade a student will earn until the curve has been calculated.
Final grade will be determined according to the grading scale as follows: point rage
of 90-100% will be A- or better, 80-89% will be B- or better, 70-79% will be C- or
better, 60-69% will be D- or better, and less then 59% will be F.

**Policy on late work and make-ups**
Attendance is expected. Late work will be accepted without penalty when adequate
documentation is provided (see below). Arrangements to make up the work should be
made within one week. Unexcused late work will receive a 5% penalty for each day
late.

You need to look at the scheduled exams below and make arrangements to prevent
schedule conflicts. There are no make-up exams!

Only if you miss an exam due to an emergency (such as illness, serious injury or a
death in your immediate family) and your absence is properly excused you may be
given a make-up exam outside of lecture time. A proper excuse of your absence is a
written request for excused absence that must be given directly to Dr. Swigonova no later than one week after the missed exam. Verbal communication with the instructor is not sufficient. Your written request for excused absence must contain: your full name, detailed description of the nature of your emergency, and the date of absence. The request must be typed and signed by you. Supporting material must be provided with your request: those include signed letter from your physician in the case of medical emergency or a copy of the obituary with a signature of a family member in the case of death in your immediate family. Failure to comply with these guidelines will result in zero points recorded for the missed exam. No one will be excused from more than one examination. If you miss more than one examination you should discuss possible options available to you with your advisor or the CAS Dean’s Office. Students who miss the final exam due to an emergency should pursue the G grade option as detailed below.

**Exam Regrades**

You may request a regrade of any portion of an exam by submitting your request in writing and explaining why you think the grading was in error. You must include a detailed justification for the correctness of your answer, including references to either the lecture notes (by date) or to the text used in the course (page, paragraph). This request must be submitted to me within one week after the date the exam results are posted. Unless the regrade is due to an additional error, please be aware that your entire exam may be reevaluated and any question that was graded incorrectly (in your favor) may also be regarded resulting in points deducted from your total.

**G grade**

If you wish to petition for a G grade, you must submit a request for this change in writing and you must document your reason(s). You will be required to make arrangements, in person, for the specific tasks you must complete in order to remove the G grade. You will be expected to sign documentation describing the work that has to be completed and the due date. All required work must be completed by the specified date otherwise a zero will be assigned for the work and final grade will be determined using this score. 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. If you miss the final exam, you may receive a G grade if the above conditions are met.

**Academic Integrity**

Students in this course will be expected to comply with the University of Pittsburgh's Policy on Academic Integrity Code (http://www.as.pitt.edu/faculty/policy/integrity.html). Any student suspected of violating this obligation for any reason during the semester will be required to participate in the procedural process, initiated at the instructor level, as outlined in the University Guidelines on Academic Integrity. This may include, but is not limited to, the confiscation of the examination of any individual suspected of violating the code and a zero score for the quiz, exam or paper will be imposed. Furthermore, no student may use any unauthorized materials during an exam, including notes, dictionaries, pagers, telephones, PEDs, programmable calculators, any devices that can connect to the internet. Cheating/plagiarism will not be tolerated. Students suspected of violating the University of Pittsburgh Policy on Academic Integrity, will be required to participate in the outlined procedural process as initiated by the instructor.

**Special Accommodations**

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 Accommodations.
Resources and Services, 216 William Pitt Union, 412–648–7890/412–383–7355 (FTY), as early as possible in the term. Disability Resources and Services will verify your disability and determine reasonable accommodations for this course.

**Recording policy**

To ensure the free and open discussion of ideas, students **may not** record classroom lectures, discussion and/or activities.

**E-mail Communication Policy:**

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.)

**Student Conduct**

In keeping with the University of Pittsburgh Student Code of Conduct, all students are expected to behave as respectful and civil members of the university community. All students will act in a considerate manner in order to create and maintain a classroom atmosphere that is conducive to learning. In addition to being unacceptable on the grounds of common decency, disruptive and disrespectful behavior contributes to unsafe working conditions. Disruptive and disrespectful behavior will not be tolerated. Examples of disruptive behavior include, but are not limited to, repeated tardiness, texting in class, speaking or acting in any sexually, racially, or ethnically harassing manner, cheating, misuse and abuse of class equipment and material, disregarding any safety guidelines. Disruptive students will be referred to the Office of Student Conduct for mediation, discipline, or both.

I am looking forward to a successful and productive semester,

Dr. Swigonova
Course Schedule
Fall Term 2012, Dr. Zuzana Swigonova

<table>
<thead>
<tr>
<th>Lecture #</th>
<th>Date</th>
<th>Topic*</th>
<th>Reading</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lecture 1</td>
<td>8/28</td>
<td>Science and scientific inquiry</td>
<td>Ch. 1</td>
</tr>
<tr>
<td>Lecture 2</td>
<td>8/30</td>
<td>Atoms and bonds</td>
<td>Ch. 2</td>
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<tr>
<td>Lecture 3</td>
<td>9/4</td>
<td>Water</td>
<td>Ch. 2</td>
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<tr>
<td>Lecture 4</td>
<td>9/6</td>
<td>Biological molecules I</td>
<td>Ch. 3</td>
</tr>
<tr>
<td>Lecture 5</td>
<td>9/11</td>
<td>Biological molecules II</td>
<td>Ch. 3</td>
</tr>
<tr>
<td>Lecture 6</td>
<td>9/13</td>
<td>The cell I: structure</td>
<td>Ch. 4</td>
</tr>
<tr>
<td>Lecture 7</td>
<td>9/18</td>
<td>The cell II: function</td>
<td>Ch. 4</td>
</tr>
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<td><strong>Homework 1</strong></td>
<td></td>
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<tr>
<td>Exam 1</td>
<td>9/20</td>
<td><strong>First midterm exam (chapters 1-4)</strong></td>
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<td></td>
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<td><em>(Friday 9/9-Fall Term deadline for students to submit Grade Option/Audit Request forms to dean’s office)</em></td>
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<tr>
<td>Lecture 8</td>
<td>9/25</td>
<td>Cell membranes</td>
<td>Ch. 5</td>
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<tr>
<td>Lecture 9</td>
<td>9/27</td>
<td>Transport across membranes</td>
<td>Ch. 5</td>
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<tr>
<td>Lecture 10</td>
<td>10/2</td>
<td>Energy</td>
<td>Ch. 6</td>
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<tr>
<td>Lecture 11</td>
<td>10/4</td>
<td>Respiration</td>
<td>Ch. 7</td>
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<td></td>
<td>10/9</td>
<td><strong>No class – Monday’s schedule</strong></td>
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<tr>
<td>Lecture 12</td>
<td>10/11</td>
<td>Photosynthesis</td>
<td>Ch. 8</td>
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<tr>
<td>Lecture 13</td>
<td>10/16</td>
<td>From cell to tissue to organs</td>
<td>Ch. 26</td>
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<tr>
<td>Lecture 14</td>
<td>10/18</td>
<td>Musculo-skeletal system</td>
<td>Ch. 26</td>
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<td><strong>Homework 2</strong></td>
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<tr>
<td>Exam 2</td>
<td>10/23</td>
<td><strong>Second midterm exam</strong></td>
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<tr>
<td>Lecture 15</td>
<td>10/25</td>
<td>Nervous system</td>
<td>Ch. 27</td>
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<td><em>(Friday 10/26-Fall Term deadline for students to submit Monitored Withdrawal forms to dean’s office)</em></td>
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<tr>
<td>Lecture 16</td>
<td>10/30</td>
<td>Brain and sensory reception</td>
<td>Ch. 27</td>
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<tr>
<td>Lecture 17</td>
<td>11/1</td>
<td>The endocrine system</td>
<td>Ch. 27</td>
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<tr>
<td>Lecture 18</td>
<td>11/6</td>
<td>Immune system I</td>
<td>Ch. 28</td>
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<td><strong>Homework 3</strong></td>
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<tr>
<td>Lecture 19</td>
<td>11/8</td>
<td>Immune System II</td>
<td>Ch. 28</td>
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<tr>
<td>Lecture 20</td>
<td>11/13</td>
<td>Cardiovascular system</td>
<td>Ch. 29</td>
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<tr>
<td>Lecture 21</td>
<td>11/15</td>
<td>The respiratory system</td>
<td>Ch. 29</td>
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<tr>
<td>Lecture 22</td>
<td>11/20</td>
<td>The digestive system</td>
<td>Ch. 30</td>
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<td></td>
<td>11/22</td>
<td><strong>Happy Thanksgiving!</strong></td>
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<tr>
<td>Lecture 23</td>
<td>11/27</td>
<td>The urinary system</td>
<td>Ch. 30</td>
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<td><strong>Project “Report on human disease” due</strong></td>
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<tr>
<td>Exam 3</td>
<td>11/29</td>
<td><strong>Third midterm exam</strong></td>
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<tr>
<td>Lecture 24</td>
<td>12/4</td>
<td>Animal development</td>
<td>Ch. 31</td>
</tr>
<tr>
<td>Lecture 25</td>
<td>12/6</td>
<td>Reproduction</td>
<td>Ch. 32</td>
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<tr>
<td>Final exam</td>
<td>12/13</td>
<td>TBA</td>
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</table>

*Topic for each lecture day may be adjusted based on the progress through the semester. Dates of the exams will NOT be altered.