UTRGV BIOL 1406.02 LECTURE SYLLABUS

BIOL 1406.02      Zen Faulkes
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Text 956-342-4426      Voice 956-665-2614
MW 1:40 – 2:55 pm, ESCNE 2.104    Office ESCNE 2.364

Textbook and/or Resource Material


•  Turning Technology clicker or TurningPoint smart phone app [https://www.turningtechnologies.com/response-options](https://www.turningtechnologies.com/response-options).

Course Description and Prerequisites

A study of the basic principles of biology. Topics will include biological chemistry, cell structure and function, photosynthesis and respiration, DNA structure and function, mitosis, meiosis, Mendelian genetics, evolution, and the structure and function of bacteria, viruses, protozoan, algae, fungi, and plants. Prerequisites: None.

Learning Objectives/Outcomes for the Course

Understand the elementary concepts of:

•  Organic chemistry, such as chemical bonds and organic macromolecules
•  Cell biology, such as cell structure, metabolism, and cell division
•  Molecular biology, such as DNA replication and protein synthesis

Learning Objectives for Core Curriculum Requirements

BIOL 1406 counts for 3 hours toward “Life and Physical Sciences” category and for 1 hour toward the “Experiential Learning” category requirements of the core curriculum. BIOL 1406 addresses these core outcomes: critical thinking, communication, empirical & quantitative skills, teamwork.

Grading Policies

There are no in class exams in the lecture portion of this class. Lecture scores consists of two parts.

•  Clicker questions during regularly scheduled class meetings. 50 points max.
•  Weekly Mastering Biology assignments given in Blackboard. 25 points max.

*Clicker questions (50 points)*

Beginning 11 September 2017, there will be in class clicker questions given using TurningPoint. You will have 110 clicker questions during the class, beginning 11 September 2017. Each question answered correctly will be worth 0.5 point; each question answered incorrectly will be worth 0.125 (yes, you get credit for showing up and trying!). You can earn total of 50 points maximum. The number of questions given during class will vary, but will usually be about 4-5. The graded questions will be clearly indicated because the question will be shown against a big red bar.
Ungraded questions for practice will not be so identified. Scores will be posted in Blackboard regularly (usually after class the same day).

There are no percentages, divisions, weighting, or any other calculations besides adding more points you earn in upcoming lectures. Your clicker points will never go down; only up. There are 55 clickers points in the lecture section of class, so you can still get a perfect score even if you miss a few days.

If you miss days due to circumstances beyond your control, provide me with written documentation from an institution, business, physician, etc., of your claim (notes from your family won’t cut it!) so that your scores can be adjusted accordingly. (The adjustment involves scaling your scores to the same proportion out of 55 that everyone else in the class has. This is applied at the end of the semester, because the calculations are tricky enough that they can’t be done “on the fly.”)

Mastering Biology assignments (25 points)

Beginning 11 September 2017, there will be a weekly pre-class assignments given using Mastering Biology, available through Blackboard. The assignment will be due Monday, 1:00 pm. Each assignment should be available by noon the previous Friday, if not before (i.e., you will have the weekend to do the assignment). The expected time required to complete each assignment will usually be around 30 minutes. The number of questions each week will vary, but usually be somewhere around 20 questions. The percentage of correct answers across all twelve weekly pre-class assignments will be multiplied by 25 for this portion of your score.

If you miss more than a day due to circumstances beyond your control, provide me with written documentation from an institution, business, physician, etc., of your claim (notes from your family won’t cut it!) so that your scores can be adjusted accordingly.

Final mark = 75% lecture + 25% lab. Fractions are not rounded up. If you get 79.9%, you have my sympathy, but not a B. Marks are never “curved.” There is no extra credit for anyone ever.

- A = 90% and up
- B = 80% to anything less than 90%
- C = 70% to anything less than 80%
- D = 60% to anything less than 70%
- F = Less than 60%

Calendar of Activities

The UTRGV academic calendar can be found at https://my.utrgv.edu/home at the bottom of the screen, prior to login. Some important dates for Fall 2017 include:

- August 31: Last day to add a course or register for fall 2017
- September 4: Labor Day – no classes
- September 11: Clicker questions and Mastering Biology assignments begin
- November 15: Last day to drop a course; will count toward the 6-drop rule
- November 23-26: American Thanksgiving Holiday – no classes
- December 6: Last day of classes
Lecture schedule

<table>
<thead>
<tr>
<th>Week of</th>
<th>Lecture topic</th>
<th>Textbook reading</th>
<th>Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>August 28</td>
<td>Introduction</td>
<td>1.1-1.4</td>
<td>1-43</td>
</tr>
<tr>
<td>September 4</td>
<td>Chemical bonds; water</td>
<td>2.1-2.4; 3.1-3.3</td>
<td>44-55</td>
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<tr>
<td>September 11</td>
<td>Carbon</td>
<td>4.1-4.3</td>
<td>56-65</td>
</tr>
<tr>
<td>September 18</td>
<td>Cell membranes</td>
<td>7.1-7.5</td>
<td>124-140</td>
</tr>
<tr>
<td>September 25</td>
<td>Proteins and enzymes</td>
<td>5.1-5.6; 8.1-8.5</td>
<td>66-91; 141-161</td>
</tr>
<tr>
<td>October 2</td>
<td>Cell structure and signaling</td>
<td>6.1-6.7</td>
<td>93-123</td>
</tr>
<tr>
<td>October 9</td>
<td>Cellular respiration</td>
<td>9.1-9.6</td>
<td>162-184</td>
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<tr>
<td>October 16</td>
<td>Photosynthesis</td>
<td>10.1-10.4</td>
<td>185-209</td>
</tr>
<tr>
<td>October 23</td>
<td>Mitosis and meiosis</td>
<td>12.1-12.3; 13.1-13.3</td>
<td>232-250; 252-266</td>
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<tr>
<td>October 30</td>
<td>Mendelian genetics</td>
<td>14.1-14.2; 15.1-15.3</td>
<td>267-276; 292-304</td>
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<tr>
<td>November 6</td>
<td>DNA structure and replication</td>
<td>16.1-16.2</td>
<td>312-327</td>
</tr>
<tr>
<td>November 13</td>
<td>RNA and protein synthesis</td>
<td>17.1-17.5; 18.1-18.2</td>
<td>333-356; 360-373</td>
</tr>
<tr>
<td>November 20</td>
<td>Population genetics; evolution</td>
<td>22.1-22.3; 23.1; 23.3-23.4; 24.1-24.2</td>
<td>462-479; 481-483; 487-499; 500-510</td>
</tr>
<tr>
<td>November 27</td>
<td>Viruses</td>
<td>19.1-19.3</td>
<td>392-407</td>
</tr>
<tr>
<td>December 4</td>
<td>Biotechnology</td>
<td>20.1-20.2</td>
<td>408-422</td>
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Other course information

UTRGV policy statements

Students with disabilities

Students with a documented disability (physical, psychological, learning, or other disability which affects academic performance) who would like to receive academic accommodations should contact Student Accessibility Services (SAS) as soon as possible to schedule an appointment to initiate services. Accommodations can be arranged through SAS at any time, but are not retroactive. Students who suffer a broken bone, severe injury or undergo surgery during the semester are eligible for temporary services. Brownsville Campus: Student Accessibility Services is in Cortez Hall Room 129 and can be contacted by phone at (956) 882-7374 (Voice) or via email at ability@utrgv.edu. Edinburg Campus: Student Accessibility Services is in 108 University Center and can be contacted by phone at (956) 665-7005 (Voice), (956) 665-3840 (Fax), or via email at ability@utrgv.edu.

Mandatory course evaluation period

Students are required to complete an online evaluation of this course, accessed through your UTRGV account (http://my.utrgv.edu); you will be contacted through email with further instructions. Students who complete their evaluations will have priority access to their grades. Online evaluations will be available November 15 to December 6.
Attendance

Students are expected to attend all scheduled classes and may be dropped from the course for excessive absences. UTRGV’s attendance policy excuses students from attending class if they are participating in officially sponsored university activities, such as athletics; for observance of religious holy days; or for military service. Students should contact the instructor in advance of the excused absence and arrange to make up missed work or examinations.

Scholastic integrity

As members of a community dedicated to Honesty, Integrity and Respect, students are reminded that those who engage in scholastic dishonesty are subject to disciplinary penalties, including the possibility of failure in the course and expulsion from the University. Scholastic dishonesty includes but is not limited to: cheating, plagiarism (including self-plagiarism), and collusion; submission for credit of any work or materials that are attributable in whole or in part to another person; taking an examination for another person; any act designed to give unfair advantage to a student; or the attempt to commit such acts. Since scholastic dishonesty harms the individual, all students and the integrity of the University, policies on scholastic dishonesty will be strictly enforced (Board of Regents Rules and Regulations and UTRGV Academic Integrity Guidelines). All scholastic dishonesty incidents will be reported to the Dean of Students.

Sexual harassment, discrimination, and violence

In accordance with UT System regulations, your instructor is a “Responsible Employee” for reporting purposes under Title IX regulations and so must report any instance, occurring during a student’s time in college, of sexual assault, stalking, dating violence, domestic violence, or sexual harassment about which she/he becomes aware during this course through writing, discussion, or personal disclosure. More information can be found at www.utrgv.edu/equity, including confidential resources available on campus. The faculty and staff of UTRGV actively strive to provide a learning, working, and living environment that promotes personal integrity, civility, and mutual respect that is free from sexual misconduct and discrimination.

Course drops

According to UTRGV policy, students may drop any class without penalty earning a grade of DR until the official drop date. Following that date, students must be assigned a letter grade and can no longer drop the class. Students considering dropping the class should be aware of the “3-peat rule” and the “6-drop” rule so they can recognize how dropped classes may affect their academic success. The 6-drop rule refers to Texas law that dictates that undergraduate students may not drop more than six courses during their undergraduate career. Courses dropped at other Texas public higher education institutions will count toward the six-course drop limit. The 3-peat rule refers to additional fees charged to students who take the same class for the third time.