Principles of Biology I (Bio 1107, sect 04) Spring 2017

Instructor: Prof. Elizabeth Lucht  Office: 213 Peeples Hall  E-mail: elucht@daltonstate.edu

Office Hours: See GAView

Class Meets: 10:50-12:05 pm Mon & Wed, in Sequoya 102. Lab Meets: 1:40-3:30 pm Mon, in Sequoya 213

Textbook: OpenStax College Biology, https://openstaxcollege.org/textbooks/biology


Course Description: This course is designed to provide an introduction to the fundamentals of biology. The focus is on the organization of life, the scientific method, the energy of life, genetics, and evolution.

Course Objectives: At the end of this course you should be able to:

1. Explain how scientists test scientific claims and compose scientific arguments (scientific method)
2. Apply principles of cellular and molecular biology to real world situations (knowledge of cellular molecules and cell function)
3. Analyze and apply scientific information to make everyday decisions (knowledge of biological applications)
4. Identify and understand the functions of cellular structures
5. Relate natural selection to adaptive evolution of organisms; describe the ample evidence that supports the concept of evolution

Prerequisites: READ 0098 unless exempt.

Evaluation: 4 Lecture Exams (100 points each) 400
Final exam 100
Connect online assignments 100
Lab 100

TOTAL = 700

NOTE: This adds up to 700 points. Divide your total points by the number of points possible to determine your grade at any point.

Lecture Exams: Exams could be composed of multiple choice, true/false, fill-in, and short answer questions. They could include questions pertaining to appropriate laboratory material.

Final Exam: The exam will be comprehensive plus will include questions about material from Chaps. 18.

Mc-Grav Hill Connect Online work: You are expected to complete an assignment prior to class and then an online quiz after class for each chapter. Due dates are set online and no extensions will be given. Plan accordingly for access to internet and a computer. The library has computers you can use if you do not have one available to you.

Lab Homework: You are expected to prepare for the current lab by reading the introduction and appropriate sections in your lab. You must bring a copy of the current week’s lab, I will not provide copies.
Final Grade Assignment:

- 90 - 100%  A
- 80 - 89%    B
- 70 - 79%    C
- 60 - 69%    D
- Less than 60%  F

Attendance Policy:

**Class:** I will try to start and end class on time, so please arrive on time. You are **strONGLY ADVISED,** but not required, to attend all class meetings. Most of the material on the exams comes from class lectures, so it is to your benefit to attend all classes. If you miss class, you will be responsible for obtaining material, announcements, and assignments given in class. I post everything on GaView. To reward those that attend class, there will be unannounced extra credit given during class. This is the only extra credit and you must be present to receive it.

**Lab:** Attendance in labs is **mandatory,** and there are no make-ups. Please notify me if you will not be able to attend a lab. Material discussed in lab is fair game for the exams. Each **unexcused absence in lab will reduce your final grade by 5 points.** We will discuss the lab at the beginning of the lab period, therefore, if you are more than 15 minutes late, you have an unexcused absence.

**Exams:** No make-up exams will be given. If you are absent for one exam, the score you earn on the final exam will be used in place of the missing exam grade.

**Syllabus Information Statements**

**DROP/WITHDRAWAL POLICY: Revised June 25, 2007**

Students wishing to withdraw from the course may do so without penalty until the mid-point of the semester, and a grade of W will be assigned. After that point, withdrawal without penalty is permitted only in cases of extreme hardship as determined by the Vice President for Academic Affairs; otherwise a grade of WF will be issued. (Please note: At Dalton State College, the Hardship Withdrawal process requires students to withdraw from all classes at the college.) The proper form for dropping a course is the Schedule Adjustment Form, which can be obtained at the Enrollment Services Office in Westcott Hall. The Schedule Adjustment Form must be submitted to the Enrollment Services Office. Students who disappear, completing neither the official withdrawal procedure nor the course work, will receive the grade of F. This instructor will not withdraw students from the class. Withdrawal from any Dalton State College classes is a student responsibility.

**COMPLETE WITHDRAWAL STATEMENT: REVISED JULY 17, 2012**

“The proper form for withdrawing from all classes at the college after the official drop/add period but before the published withdrawal date is the Schedule Adjustment Form. All students must meet with a staff member at the Office of Academic Resources in the Pope Student Center to initiate the withdrawal process. After meeting with the staff member, students will then finalize the withdrawal process in the Enrollment Services Office.”

**ETHICAL CONDUCT**

Academic Dishonesty: Cheating and plagiarism are a part of the Dalton State Code of Student Conduct, which can be found in its most updated form at http://daltoncampuslife.com/student-conduct/. ANY assistance provided or given in any way toward work in a class constitutes cheating, unless such behavior is authorized by your instructor. Additionally, any use of the ideas or words of others should be noted, or this will constitute plagiarism. For more details on what Dalton State considers to be Academic Dishonesty, please review the Code of Student Conduct. Instructors will assign grades based on classroom performance. Additional sanctions may be provided as a learning experience from the Student Conduct process. Borrowing another students’ work or collaborating on an assignment not designated as collaborative is unacceptable. Furthermore, presenting work that was completed for another class, while not plagiarism technically, is not the same as presenting original work, and is therefore unacceptable. **Cheating on an exam or lab will result in an "F" for the course and referral to the Student Life Academic Misconduct board.** Cheating involves using other resources other than your own mind and will not be tolerated. I may use plagiarism detection software to analyze any writing assignments.

Classroom Behavior: Dalton State is committed to respect via the Roadrunner Respect pledge. To learn more, please visit http://daltoncampuslife.com/roadrunner-respect/.
"I pledge to show my fellow Roadrunner students, faculty, staff, and administration respect by treating others the way they want to be treated and by thinking about others first before making decisions that might affect them.

OFFICIALLY APPROVED DSC GROUPS AND ACTIVITIES: (Effective Fall 2013)

When students are engaged in officially approved Dalton State groups or activities that require them to participate in events off campus during school days, they shall be treated similarly to any faculty or staff member acting in that same capacity. Thus, just as faculty and staff have excused absences from their regular work schedules, students shall be excused from class without penalty if they are off campus representing Dalton State College in an approved, official capacity during their regular class time. Examples include presenting a paper or otherwise participating in a conference, attending a University System student affairs event, participating in intercollegiate competition (athletic or academic), participating in an approved field trip, etc. Just as faculty and staff members are required to submit Request to Travel forms for approval, in order to be excused, the student needs to provide the following information to the instructor prior to the date when he/she will be absent from class: notification of the event (in the case of athletics, students should provide each instructor a schedule of away events at the beginning of the semester or as soon as possible after the schedule is available); estimated time of departure from and return to campus (for example, if a student has an away game in the evening and will not be leaving campus until 3:00, he/she will not be excused from classes prior to that time on that day; similarly if the event is in the morning and the student will be returning to campus during the day, he/she is expected to attend any class scheduled after the return trip); and contact information for the person or organization sponsoring/authorizing the student’s participation in the event.

The student shall be allowed to make up any work missed during the time he/she is off campus representing DSC in an official capacity. He/she shall discuss what will be missed with the instructor and make arrangements to make up any assignments, tests, presentations, etc. that were scheduled on that date.

Inclement Weather/other emergencies

See the Dalton State College Webpage/GAView for Announcements about closings or listen to local radio or television stations for information. As all course content is posted online, you will be responsible for the scheduled material. We will review when the campus reopens.

Access Statement for Students with Disabilities:

Students with disabilities or special needs are encouraged to contact the Disability Access office. In order to make an appointment or to obtain information on the process for qualifying for accommodations, the student should visit the Disability Access Library Guide at http://www.libguides.daltonstate.edu/Disability or contact the Disability Access office.

Contact information:
Andrea Roberson, Associate Director of Disability Access and Student Support Services
Pope Student Center, upper level
706/272-2524
aroberman@daltonstate.edu

Workforce Development Statement

Questions regarding students receiving financial assistance through the Workforce Innovations Opportunity Act should be directed to 706-295-6840.

Sex Discrimination, Harassment, & Assault

Sexual harassment is unwelcome, gender-based verbal or physical conduct that is sufficiently severe, persistent or pervasive that it has the effect of interfering with, denying or limiting someone’s ability to participate in or benefit from the college’s educational program and/or activities, and is based on power differential (quid pro quo), the creation of a hostile environment, or retaliation. Sexual misconduct is a form of sexual harassment prohibited by Title IX. Sexual misconduct refers to “physical sexual acts perpetrated against a person’s will or where a person is incapable of giving consent due to the victim’s use of drugs or alcohol. An individual also may be unable to give consent due to an intellectual or other disability.” Sexual misconduct includes dating violence, domestic violence, rape, sexual assault, sexual battery, stalking, and sexual coercion.

Reporting Options

Call 911 if you are in an emergency situation

Dalton State Public Safety (this report is not confidential)
Tech Building- Upper Level - 706-272-4461
Online Sexual Assault Report -
https://dynamicforms.ngwebsolutions.com/ShowForm.aspx?RequestedDynamicFormTemplate=3fe5724c-a8bd-4a31-9c25-1a3d35110a51

If you would like to report to Dalton State Administration: (this report is not confidential)
Report Title IX complaint online - http://daltonstate.edu/campus_life/student-conduct-about.cms
Report Student-on-Student Title IX complaint in person:
Brittnie Lee, Office of Student Life
Coordinator for Student Responsibility & Service/ Deputy Title IX Coordinator
Pope 113
balee@daltonstate.edu, 706-272-2999

Report Title IX complaint involving Faculty or Staff in person:
Faith Miller, Human Resources
Director of Human Resource/ Title IX Coordinator
Memorial 122
fmiller@daltonstate.edu, 706-272-2034

If you would like to talk with someone confidentially:
Dalton State Counseling & Career Services, Academic Resources
Lower Pope
706-272-4429
counseling@daltonstate.edu
http://libguides.daltonstate.edu/Counseling
A Few Odds and Ends:

• Please silence/turn off cell phones in class. Texting is not allowed in lecture or lab because it is distracting to me and other students. If you are texting in class or lab, then I will ask you to stop. If you continue texting, then it will reflect poorly on your participation in class and may prevent your grade from being bumped up if you are borderline for a better grade at the end of the semester. (If you are expecting an emergency call/text, please let me know BEFORE class.)

• Please don’t leave class or lab early, unless you have notified me of your need to do so. Also, please do your best to arrive to class on time & I’ll do my best to begin and end the class on time.

• Questions and discussion in class and lab are encouraged – this is your class and I want you to participate! On the other hand, private conversations are distracting to others, so please refrain.

• The last day to drop this class without penalty is March 17. You will be assigned a grade of W. After this date, withdrawal without penalty is permitted only in cases of extreme hardship; otherwise a grade of WF will be issued. The proper form for withdrawing from all classes at the college after the official drop/add period but before the published withdrawal date is the Schedule Adjustment Form. Students who fail to complete the official drop/withdrawal procedure will receive the grade of F. Withdrawal from class is a student responsibility. The grade of W counts as hours attempted for the purposes of financial aid.

Tips for Succeeding in Biology 1107

1) **Keep up!!** One of the challenging aspects of the course is volume of material to be covered. Do the end of chapter problems after class to test your understanding of concepts covered. If a question stumples you, talk with me right away. If you fall behind, it will be difficult to catch up.

2) **Study Hints:**

   A) **Think big picture.** Don’t sit down to memorize facts as if the material is just a random list of items. Fit each detail into a larger framework. Concept maps are your friends, note cards are not. You will remember things much better if they are in the context of a bigger whole rather than isolated pieces.

   B) **Before Class:** Spend some time skimming the chapter to be covered; do not let my class be the first time you hear about the material. Don’t get bogged down in detail – just get the big picture, cover major points and become familiar with the terminology (the chapter summary at the end of the chapter will be helpful here). Carefully review notes from the previous lecture. What is unclear? What don’t you understand? Ask a classmate for help, check the relevant section in the book, or ask me before/after class. Many concepts stump multiple students, so your question will help other students! Take care of problems as they arise or they may pile up and ambush you the night before an exam.

   C) **In Class:** Be awake and aware! Many students write frantically everything I say during class thinking they will “learn it later.”

   D) **Exams:** My questions are designed to test Blooms levels of learning. The most elemental kind of learning is **remembering.** In science, memory is important, not as an end in itself, but primarily in the sense that knowing vocabulary is important for learning a foreign language. Science is its own language. A second level of learning is **understanding.** Do you really understand the material and can you take information in one form and explain it in another form. Test your comprehension by trying to explain concepts to another person. A third level of learning is **applying.** Can you solve problems using required skills or knowledge? Keep these levels of learning in mind as you study.

   E) **General advice on multiple choice questions:** 1) Read the problem, read all answers. 2) The correct answer is both true and relevant. 3) Don’t make mechanical mistakes. Check to see that if you want answer A, answer A is what you marked. 4) Don’t read more into the question than what is there. Some questions are easy, some are harder; you’ll have to decide which is which.
### Lecture Schedule Spring 2017 (tentative)

(Sec. 04), Mon & Wed, in Sequoya 102.

<table>
<thead>
<tr>
<th>Dates</th>
<th>Topics</th>
<th>Lab</th>
<th>Exams</th>
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<tbody>
<tr>
<td>Jan 9, 11</td>
<td>Intro, Study of Life, Ch 1</td>
<td>NO LAB</td>
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<tr>
<td>Jan 16, 18</td>
<td>MLK (no class) ; Chemical Foundation, Ch 2</td>
<td>NO LAB</td>
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<tr>
<td>Jan 23, 25</td>
<td>Chemical Foundation, Ch 2 ; Biological Macro, Ch 3</td>
<td>Scientific Method</td>
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<tr>
<td>Jan 30, Feb 1</td>
<td>Biological Macro, Ch 3; Exam 1</td>
<td>Taxonomy</td>
<td>Exam 1: Feb 1 (Ch 1-3)</td>
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<tr>
<td>Feb 6, 8</td>
<td>Cell Structure, Ch 4; Plasma Membranes, Ch 5</td>
<td>Macromolecules</td>
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<td>Feb 13, 15</td>
<td>Plasma Membranes, Ch 5; Reproduction, Ch 10</td>
<td>Microscopy</td>
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<tr>
<td>Feb 20, 22</td>
<td>Exam 2; Metabolism, Ch 6</td>
<td>Structure &amp; Function of Living Cells</td>
<td>Exam 2: Feb 20 (Ch 4, 5, 10)</td>
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<tr>
<td>Feb 27, March 1</td>
<td>Cellular Respiration, Ch 7</td>
<td>Diffusion, Osmosis, &amp; Membranes</td>
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<tr>
<td>March 6, 8</td>
<td>Photosynthesis, Ch 8</td>
<td>Enzymes</td>
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<tr>
<td><strong>March 13, 15</strong></td>
<td>SPRING BREAK (no class)</td>
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<tr>
<td><strong>March 20, 22</strong></td>
<td>Review Ch 6-8; Exam 3</td>
<td>Respiration &amp; Photo.</td>
<td>Exam 3: Mar 22 (Ch 6-8)</td>
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<tr>
<td>March 27, 29</td>
<td>Heredity, Ch 12 &amp; 13</td>
<td>Mitosis &amp; Cytokinesis</td>
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<tr>
<td>April 3, 5</td>
<td>Meiosis, Ch 11.1</td>
<td>Heredity</td>
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<td>April 10, 12</td>
<td>DNA Replication, Ch 14</td>
<td>Biotechnology</td>
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<td>April 17, 19</td>
<td>Review; Exam 4</td>
<td>Nucleic Acids</td>
<td>Exam 4, April 19 (Ch 11-14)</td>
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<td>April 24, 26</td>
<td>Intro to Evolution, Ch 18</td>
<td>Evolution</td>
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<td>May 1</td>
<td>Review</td>
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<td><strong>May 3</strong></td>
<td>FINAL exam (Comprehensive)</td>
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<td>FINAL, May 3</td>
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<td>10:30-12:30pm</td>
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** Last date to withdraw with W: March 24 **
Lab Schedule Spring 2017 (tentative)

(Sec. 04), Monday 1:40-3:30 p.m., Seq. 213

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<td><strong>SPRING BREAK</strong></td>
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<td>Cell Respiration and Photosynthesis</td>
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<td>March 27</td>
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<td>Apr 3</td>
<td>Heredity</td>
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<tr>
<td>Apr 10</td>
<td>Nucleic Acids: Blueprints for Life</td>
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<tr>
<td>Apr 17</td>
<td>Biotechnology</td>
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<tr>
<td>Apr 24</td>
<td>Evidence of Evolution</td>
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