

## Principles of Biology II (BIOL 1108, sect. 3) Fall 2015

Instructor: Prof. David DesRochers    Office: 224 Peeples Hall

Phone: 706-272-2165    E-mail: [ddesrochers@daltonstate.edu](mailto:ddesrochers@daltonstate.edu)

Office Hours: M & T: 3–5, T & R: 8–10, or by appointment

Text: Free, on-line text: <https://openstaxcollege.org/textbooks/biology>

For those of you who still have your BIOL 1107 text, that is fine: *Biology, 9<sup>th</sup> ed* (Solomon et al. 2011) (Older editions are okay). Some students prefer to have both but the slide outlines are most important!

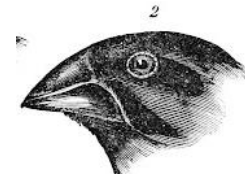
Lab Manual: Lab Activities are available at <http://libguides.daltonstate.edu/PrinciplesofBiology/labmanual>. Each student will be responsible for printing out the lab activity and bringing it to lab with you.

Course Description: This course is designed to provide an introduction to the fundamentals of biology. The focus is on several aspects of evolution, human anatomy and physiology, and the arrangement and interaction of populations, communities, and ecosystems.

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

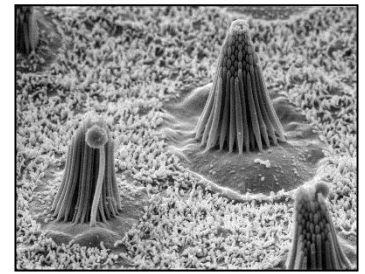
1. Demonstrate an understanding of the structure and function of the following animal systems: nervous, circulatory, immune, digestive, respiratory, urogenital, and endocrine.
2. Demonstrate an understanding of human gametogenesis, fertilization, and early development.
3. Relate animal behavior to genetics and evolution.
4. Understand the major factors which cause microevolution and solve problems using the Hardy Weinberg equation.
5. Summarize factors that can lead to speciation
6. Demonstrate an understanding of the interactions between populations, communities, and the environment
7. Demonstrate effective use of a microscope.

<u>Evaluation:</u>	4 Lecture Exams (100 pts each)	400
	Comprehensive Final Exam	100
	≈20 Clicker Activities (5 pts each)	100
	≈10 Lab Quizzes (10 pts each)	<u>100</u>
	TOTAL	≈ 700



- **Lecture Exams:** Exams will have multiple-choice, true/false, and short answer questions.
- **Final Exam:** This exam will be comprehensive. You can use one 3X5 inch index card with notes. It must be approved by me prior to the exam.
- **In-class Clicker sessions** (5 points each). ≈20 Clicker Sessions (5 pts each) (all multiple choice or T/F) will be given during lectures and sometimes labs throughout the semester. I will drop your 3 lowest scores. You **MUST** be present in order to get credit. Clicker sessions **CANNOT** be made-up! The sessions will cover any material from lecture material we are covering within a unit. These questions help to ensure you are reviewing and to help you focus during lecture. You will have 2 weeks at the start of the term to get your clicker. I will allow you to submit 1 paper response if you forget it.
- **Lab Quizzes:** There will be 10 lab quizzes. I will drop your lowest score. Lab quizzes will cover material from the current lab. Reading the lab assignments ahead of time will help you prepare for lab and improve your performance.
- **Late Assignments will not be accepted except in extreme circumstances.**
- **Extra Credit:** I do make extra credit available throughout the semester, but keep in mind that there are over 700 regular points to earn. Anyone asking for extra credit, at any time, will activate a two-week period on extra credit during which time no extra credit will be available.

Final Grade Assignment: A: 90–100%, B: 80–89%, C: 70–79%, D: 60–69%, F: <60



## Attendance Policy:

**Class:** I will try to start and end class on time, so please arrive on time. You are ***strongly advised*** 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 are responsible for obtaining material, announcements, and assignments given in class. Remember, you cannot make up missed lecture questions. My slides are available on GAView.

**Lab:** Attendance in labs is mandatory, and no make-ups are available. Please notify me if you will not be able to attend a lab.

**Exams:** No make-up exams are given. If you are absent for one exam, the average score of all exams will replace the missing exam grade. If you do not miss any exams, the average score of all exams will replace the lowest exam grade. Turning in your exams on the day of the final will add 5 pts to your final exam score.

## Tips for Succeeding in Biology 1108

- 1) **Keep up!!** One of the challenging aspects of the course is the volume of material to be covered. If you fall behind, it will be difficult to catch up.
- 2) **A) Always 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 frame work. You will remember things much better if they are placed in a "web" of associations rather than isolated tidbits.

**B) Before Class:** spend some time skimming the chapter to be covered. 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. 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 become automatic writing machines during class - "I've got to get it down so I can learn it later." Don't fall into this trap – let your mind be as active as your pen. If you are falling asleep - get up and do some jumping jacks next to your seat. If you snooze, you lose.

**D) Exams:** My questions are designed to test three levels of learning. The most elemental kind of learning is **memorization**. 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. A second level of learning is **comprehension**. Do you really understand the material and can you take information in one form and restate it in another form. Test your comprehension by trying to explain concepts to another person. A third level of learning is **application**. 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. If you want answer A, then mark A on the scantron. 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. Feel free to ask questions about questions.

**F) If you know** any of the images in the syllabus, e-mail me (only) for 1 bonus point for each correct one. You must respond by the last day of classes and must not share information with your classmates.

Academic Honesty: Cheating and plagiarism are covered under 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.

#### A Few Odds and Ends:

- 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." This includes anything that may detract from the learning environment such as constant texting and cell phone or distracting side conversations.
- Questions and discussion in class and lab are encouraged – this is *your* class, and I want you to participate and to be successful! Note that side conversations are distracting. I also find habitual phone use to be very distracting. Please keep your phone in your pocket or bag.
- The last day to drop this class without penalty is **Oct. 27<sup>th</sup>**. You will be assigned a grade of W. After this date, withdrawal without penalty is permitted only in cases of extreme hardship as determined by the Vice President for Academic Affairs; otherwise you earn a WF. 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 must meet their advisor to initiate the withdrawal process. 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.
- Workforce Innovations Opportunities Act: Questions regarding students receiving financial assistance through the WIOA should be directed to 706-295-6840.
- Students with disabilities or special needs are encouraged to contact Disability Support Services. In order to make an appointment or to obtain information on the process for qualifying for accommodations, the student should visit the Disability Support Services Library Guide <http://libguides.daltonstate.edu/Disability> or contact the coordinator Andrea Roberson. Pope Student Center, lower level 706/272-2524 ([aroberson@daltonstate.edu](mailto:aroberson@daltonstate.edu))
- If classes are cancelled due to inclement weather, please complete the reading assignment for the date(s) that we miss class. Complete review questions at the end of the chapter(s), and check your e-mail for additional instructions. Make-up days may be required, so please be flexible.

## 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](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](mailto: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](mailto:fmiller@daltonstate.edu) 706-272-2034

#### **If you would like to talk with someone confidentially:**

Dalton State Counseling & Career Services, Academic Resources

Lower Pope

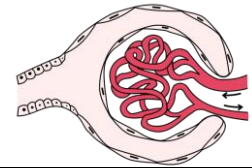
706-272-4429

[counseling@daltonstate.edu](mailto:counseling@daltonstate.edu)

<http://libguides.daltonstate.edu/Counseling>

**Lecture Schedule Fall 2015 (tentative)**

Tues & Thurs: 1:40–2:55 p.m., Peeples 114



<b>Dates</b>	<b>Topics (B = Book, O = Online)</b>	<b>Exams</b>
Aug. 18, 20	Course Intro, Ch. 19: <a href="#">Evol. Change in Populations</a> (B); Ch. 18–19 (O)	
Aug. 25, 27	Evol. cont., Ch. 20: <a href="#">Speciation &amp; Macroevolution</a> (B); Ch. 18–19 (O)	
Aug. 26, 28	Speciation cont, Ch. 41 <a href="#">Neural Signaling</a> (B); Ch. 35 (O)	
Sept. 1, 3	Signaling cont, Review	Exam 1: Sept. 3(Ch. 19–20, 41)
Sept. 8, 10	Ch. 42: <a href="#">Neural Regulation</a> (B); Ch. 35 (O)	
Sept. 15, 17	Ch. 43: <a href="#">Sensory Systems</a> (B); Ch. 36 (O)	
Sept. 22, 24	Ch. 44: <a href="#">Internal Transport</a> (B); Ch. 40 (O)	
Sept. 29, Oct. 1		Exam 2: Oct. 1 (Ch. 42–44)
Oct. 6, 8	Ch. 45: <a href="#">The Immune System</a> (B); Ch. 42 (O)	
Oct. 15	Ch. 46: <a href="#">Gas Exchange</a> (B); Ch. 39 (O)	
Oct. 20, 22	Ch. 47: <a href="#">Digestion &amp; Nutrition</a> (B); Ch. 34 (O)	
Oct. 27, 29	Ch. 48: <a href="#">Osmoregulation</a> (B); Ch. 41 (O)	Exam 3: Oct. 29 (Ch. 45–47)
Nov. 3, 5	Osmoregulation cont, Ch. 49: <a href="#">Endocrine Regulation</a> (B); Ch. 37 (O)	
Nov. 10, 12	Endocrine cont, Ch. 53: <a href="#">Intro. to Ecology</a> (B); Ch. 45 (O)	
Nov. 17, 19	Ecology cont.	
Nov. 24	Exam 4	Exam 4: Nov. 24 (Ch. 48–49, 53)
Dec. 1, 3	Review	
<b>Dec. 8, 1 – 3 p.m.</b>	<b>Final Exam: Comprehensive</b>	<b>Time: 1–3 p.m.</b>

**\*\* Last date to withdraw from course without penalty: October 27<sup>th</sup> \*\***

### **Lab Schedule for Fall 2015 (tentative)**

Thurs: 3:05 – 4:55 p.m., Seq. 209

#### **Reminder:**

Lab Activities are available at <http://libguides.daltonstate.edu/PrinciplesofBiology/labmanual>. Each student will be responsible for printing out the lab activity and bringing it to lab.

<b>Dates</b>	<b>Topic</b>
Aug. 20	<a href="#">Cystic Fibrosis &amp; Evolutionary Change</a> (Author: Celeste Humphrey)
Aug. 27	<a href="#">Nervous System</a> (Author: Gene Mesco)
Sep. 3	<a href="#">Sensory System</a> (Author: Gene Mesco)
Sep. 10	<b>No Lab</b>
Sep. 17	<a href="#">Circulation</a> (Author: Hussein Mohammed)
Sep. 24	<a href="#">Respiration</a> (Author: Hussein Mohammed)
Oct. 1	<a href="#">Fetal Pig 1: Digestion, Respiration, &amp; Circulation</a> (Author: DesRochers)
Oct. 8	Fetal Pig 2: Digestion, Respiration, & Circulation
Oct. 15	<b>No Lab</b>
Oct. 22	<a href="#">Fetal Pig 3: Reproductive &amp; Urinary</a> (Author: DesRochers)
Oct. 29	Fetal Pig Review
Nov. 5	Fetal Pig Quiz
Nov. 12	<a href="#">Reproduction &amp; Development</a> (Author: DesRochers)
Nov. 19	Ecology Game ( <i>Omitted due to time constraint</i> )
Dec. 3	<a href="#">Observing ecosystems &amp; Field Notes</a> (or Review) (Author: DesRochers & Humphrey)