Bio 100: Biological Principles and the Human Environment

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Office Hours: Tue 12:30-1:30; Wed 2:00-3:00; or by appointment/when my office

door is open

Course Information:

Class: Room #: TNR 170

Day/Time: 11:00-11:50 T R (Tuesday/Thursday)

Laboratory: Room #: TNR 258

Day/Time:

Section 1 3.0: 8:00-10:50 R (Thursday) Section 2 3.0: 8:00-10:50 F (Friday) Section 3 3.0: 13:00-15:50 R (Thursday)

Texts:

1. Biology: Concepts and Connections, by Campbell, Reece, Taylor, and Simon (rental)

Optional (on reserve at the library):

2. Discover Biology, 3rd edition by Cain, Damman, Lue, and Yoon (on reserve at the library—no need to buy this one.)

Description: Survey of biology emphasizing present & future relationships of humans to their environment

Biology is the study of life and living things. What does it mean to be "alive"? How do living things survive on planet Earth, and change as the Earth changes? This course is an introduction to basic concepts related to two major and inter-related subtopics within biology: evolution and ecology. Biology is a science, meaning that people study life using a process called the scientific method. Whenever possible, I will draw from examples (old and new) of people's work in the sciences of ecology and evolution, to highlight the process of using the scientific method to understand the world. I will also attempt to cover some current examples of "ecology and evolution in the news"—the scientific work and evidence behind some common topics in the mass-media.

This course will inevitably leave out many other subtopics in biology: anatomy, physiology (more than the basics), details of immune systems of plants and animals, development (physiological changes between the beginning and the end of an organism's life), biodiversity (a survey of the different kinds of organisms on Earth), etc. I have chosen to leave these out, *not* because they are unimportant, but only because there isn't time to cover all topics in biology.

The main purposes of this class are:

- 1. For you to gain an understanding of how scientists explore the world.
- 2. For you to gain a current understanding of some major concepts in biology,

3. For you to understand that organisms occur in an ecological and evolutionary context, and this context can help us to gain insight into how nature works.

Course Goals

The main goal of this class (for me) is to help you understand some of the major ideas in biology, the importance of biology in our lives, and how biologists think. Because everyone learns differently, it is important for you to figure out what works best for you when learning this material. I will help you in any way I can. The best way to understand the material is to try to figure things out for yourself, and then ask questions in class or attend office hours if you are still having trouble. This means that students must take an active role in their own learning, both in and out of the classroom. I will do whatever I can to help you along the way, by presenting or explaining the material as needed, and by giving a variety of assignments, including reading, writing, and group activities, to help you to understand the material. I hope that you will finish the semester better able to understand and appreciate the world of science, and better able to formulate, write, and discuss your ideas. Try not to be afraid to try new things, or to try doing things that seem difficult – if you learn something from the experience, consider this success.

Desire 2 Learn & Clickers

This semester we will use Desire2Learn (D2L) as a clearinghouse for course information. You will be able to access your grades, and handouts on D2L (messages will be sent through email). The website for D2L is: https://uwsp.courses.wisconsin.edu/. You probably also have a link in your portal, or "MyPoint" webpage under Academics. When logged onto MyPoint (using your campus login and password), you will find a link to Biology 100. Please check your email and the D2L site often (especially before classes), in case I have left an important message for you. Also, homework will be posted under the week in which it was assigned (not necessarily the week in which it is due!).

Clickers

This class uses "Clickers" to do interactive polling. I may not use clickers in every class period, but I will try to use them at least once in each week. You are required to lease a clicker for \$8 for the semester. This semester lease fee will be automatically added to your UWSP student bill. You will need your UWSP Student ID to lease a clicker. Clickers are available through:

- *UWSP's Help Desk*, located in the basement of the LRC, room 023. For hours: http://www.uwsp.edu/IT/helpdesk/index.aspx/
- ResNet, located in the basement of Debot, room 068. For hours: http://www.uwsp.edu/it/resNet/ResnetGeneralInformationS.aspx/

Important: Your clicker may be used in any class that requires clickers for the semester. *Returning clickers:* Clickers must be returned to one of these areas **before the end of finals.** Students with unreturned clickers will receive an additional \$39 billed to their UWSP account.

Policies

Academic Honesty

An honest attitude is critical to real learning and progress in all academic endeavors. Being an honest learner requires a commitment to abide by and foster academic honesty in all its aspects. I expect you to have a thorough appreciation of what academic honesty means, and to have made a firm commitment to embody these standards with regard to your own learning. Plagiarism is defined in Chapter 14 of the UWSP Rights and Responsibilities Publication.

What is plagiarism?

- 1. If you use someone else's ideas, even if you paraphrase them, and do not cite them.
- 2. If you take entire large phrases or sentences from sources without BOTH citing AND putting these in quotes.

This is true for any written assignment or group assignment for which I expect everyone to turn in their own work. Also, please do not plagiarize my lab handouts or written assignments. Plagiarism counts as using entire phrases or sentences from someone else's work, and using these as your own—even if you cite these phrase or sentences, it still counts as plagiarism unless you put other people's phrases in quotes.

Why is plagiarism a bad thing?

- 1. **I cannot tell what you have learned**—what do you really understand and what have you simply copied?
- 2. **It is illegal.** In the working world, people are fired for this sort of thing. In academia, the consequences are also serious.
- 3. **It is deceptive and immoral.** It is not right to use ideas or words of others and not give them credit.

How can people avoid it? (Plagiarism is really easy to avoid.)

- 1. If you can write in your own words about what you have read in an article **without even looking at the wording of the article itself**, you will likely do fine. Then, if you got the information from a source just cite that source appropriately.
- 2. If you must use someone's words, put quotes around them and cite them!
- 3. If you aren't sure, ask me! There is no penalty for asking me about something beforehand!

What happens if a student plagiarizes an assignment?

Any failure to follow the UWSP Academic Honesty Code (including plagiarism on any assignment) will result in a zero grade for that assignment, a meeting with me to discuss it, and a written letter to go in your university file, at the very least. If a second assignment is plagiarized by the same person, the grade for the course will drop at least one letter grade. Here is the Very Important Link to the code: http://www.uwsp.edu/centers/rights/RRBOOKLET8-2005-06.pdf. Also, I reserve the right to submit any and all written student work to turnitin.com. I require that you turn in digital copies of all written assignments.

Please work and learn with an open attitude. We can only identify the limitations of our own thinking if we question ourselves and others in an open, rigorous way. In this sense,

academic honesty is integral to developing analytic thinking skills, and critical to the process of real learning. Also, developing these skills (an open, flexible attitude, and respectfully critical) will serve you well in the working world, whatever you end up doing.

Attendance Policy

Because participation in class/group discussions and in-class assignments are part of your grade, attendance in BOTH class and lab is very important. As you are all part of groups, absences in class and/or lab will not only affect your ability to learn the material (and thus your grades), but also will affect members of your groups in class and lab (see also late policy). The only excused absences are those sanctioned by the university: university-sanctioned sports events, class field trips, death in the family, serious illness, or accident. If you have missed a lab or class and did not let me know ahead of time, or do not have a very good excuse, you will get a zero on any lab or in-class assignments you missed. Please do not announce to me that you must be somewhere and expect it to be excused – it is your responsibility to provide written documentation!

Late policy

If you cannot complete an assignment on time, the grade will drop by half a letter grade per day. If you let me know **ahead of time by email** that you are sick or for some other reason cannot make it, I will allow you to hand in the assignment up to two days late without penalty. I will accept no more than three late assignments from any student. It is **your responsibility** to hand in assignments on time. Exams must be taken at the assigned time and alterations to this schedule will only be made for personal injury or emergencies (e.g. death in the family, serious accident, or hospitalization). In such cases, evidence of some kind must be provided and you are expected to reschedule the exam and/or complete the assignment as soon as possible.

Grading Policy

I will assign 1 **short** paper during the semester, worth 50 points. I will also give several (~10) quizzes as homework after class (due by the start of the next class), each worth 10 points. The quizzes will be on D2L, but there will often be parts to hand in at the start of class. I will assign more quizzes than that, but will only count your 10 highest scores. Two midterm exams will be worth 60 points each, and the final exam will also be worth 60 points (**may be given during class on Thursday, 13 December**). Lab assignments are to be written for **each lab**. I will give more lab assignments than I will collect for grades, but **I may not announce ahead of time which lab assignments will be graded**. Lab assignments are worth 30 points each. Professionalism (including class, lab, and group participation; see rules below) will be worth 50 points. Part of your class professionalism grade will involve a chance to rate yourself and others in your group. The total grade will be out of approximately 470 points. **I do not curve grades**.

Professionalism

College is your gateway into the working world. Thus, I will follow practices of common courtesy and professionalism expected in the work place. I expect that you do the same, as well as that you remain engaged in class and lab, and turn in stapled, typed assignments with sources cited, except when otherwise specified. We will develop standards of professional behavior together on the first day of class. You will be held to those standards, and these will be reflected in your professionalism grade.

Class Rules (as determined during the first class):

1.

Grades by assignment:

Assignment	<u>Points</u>
10 HW 'quizzes' × 10 points each	100
1 written assignment @ 50 points	50
3 exams (60+60+60 points)	180
3 lab assignments \times 30 points each	90
Professionalism (in lab and class)	50
Total	470

Grading scale:

Grade		
A	70%-72.5%	C-
A-	67%-69.5%	D+
B+	63%-66.5%	D
В	60%-62.5%	D-
B-	< 60%	F
C+		
C		
	A A- B+ B C+	A 70%-72.5% A- 67%-69.5% B+ 63%-66.5% B 60%-62.5% C+

Going for help:

If you need help with assignments or concepts we are learning, there are many ways to get help:

- 1. Please ask questions in class.
- 2. Study in groups outside of class—your peers may be able to explain things to you in different ways that can help (also use study suggestions handout posted on D2L).
- 3. Ask me questions during my office hours (or when I am available in my office, # 337)
- 4. Look at the exam keys I post after exams are over—do you understand why your answers were correct or incorrect?
- 5. If you still are feeling lost, consider a tutor—An excellent on-campus resource for writing is the Tutoring and Learning Center (TLC http://www.uwsp.edu/tlc/). Please do not be embarrassed to take your lab reports and any other writing to the TLC they have helped many students improve their grade in my courses!
- 6. If you have a difficult time speaking up in class and are worried about your participation grade, please come and talk with me.

If you are having trouble that is more personal in nature, there are ways to get help:

- 1. If you need someone to talk to, you can speak to me if you wish. You may wish to visit the UWSP Counseling Center (http://www.uwsp.edu/counseling/tipsforstudents.aspx) (715)346-3553, Delzell Hall. They help people with all sorts of problems, minor and major.
- 2. If you are experiencing difficulties that are affecting your grades, you may wish to visit the Student Academic Advising Center (http://www.uwsp.edu/advising/), (715)346-3361,

Student Services Center (building #2) in room 103. They can help you decide what to do if you wish to drop or withdraw from a course.

Drinking and your GPA

A recent study (Lust, Ehlinger and Golden, 2008) on the health and behavior of college students at the University of Minnesota confirms that the three behaviors with the most damaging effect on GPA were: drinking, spending excessive non-work time with tv/internet/computer, and sleeping too little.

In the study, the authors report that students who drank in the past two weeks had a gpa 0.3 points lower than non-drinkers, on average. This is less of an effect than the 0.5-point cost of binge-drinking any time during the semester: it is reasonable to expect that more drinking, and drinking over longer periods of time, have greater negative consequences on performance in college.

Keep in mind, these surveys necessarily exclude unsuccessful students: students who drop out or are suspended due to poor performance are obviously not included in a late-semester survey. This means the results are likely to be UNDERESTIMATES for the negative effects.

A summary of the report, containing a link to the full article, can be found at: http://www.insidehighered.com/news/2008/10/21/health

See also: tentative course schedule with readings and topics.