

BIOB 101-001  
DISCOVER BIOLOGY  
Spring 2011

Your Instructor: Carl G. Castles, Ph.D.

Rm. 134 Science; 657- 2014

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Office Hours: M or F after class; Mon 1:00-3:00; Fri 12:00-2:00; or by appointment.

Your Text: *Biology: Concepts and Connections 6<sup>th</sup> ed.* by Campbell, Reece, Taylor, Simon, and Dickey. This is a very readable text designed for non-majors courses such as this. In addition, the publisher has provided a website to accompany the text (<http://www.campbellbiology.com>) that you should find quite useful. Lecture notes and slides will be posted on D2L.

Your Task: I realize that most of you are taking this course because it fulfills part of your requirements for graduation. Therefore, I believe your task is not to become a biologist but instead to become familiar enough with the concepts of the biological sciences to better understand the natural world around you. Hopefully, after completing this course you will become biologically literate and able to gain a better understanding of the current issues of the day that involve biology. Such issues include cancer, disease, genetic engineering, ecology, and environmental awareness. You should also gain some insight into what is involved in the whole scientific process, including problem solving, data interpretation, and critical thinking.

Your Grade: To survey the entire realm of the biological sciences in a single semester is a daunting if not impossible task. We will be covering an enormous amount of material in a rather short period of time. Therefore, it is imperative that you keep up with the reading assignments and the material covered in the lectures. My lectures will attempt to pull out what I believe is the most relevant information from the textbook. In other words, by coming to the lectures you can narrow your focus to what I think is the most important material in the book, instead of all of the material in the book.

Four major exams and a final exam will be given during the semester to test your ability to recall and synthesize the information presented in particular blocks of the course. You will be expected to use your skills of analysis, critical thinking, and problem solving to answer exam questions ranging from true-or-false to matching and multiple choice. Short essay questions may also be used to assess your writing skills as well as your ability to apply your knowledge of biology. Once you receive your exam grade, I will post an exam key in the room for several days afterward. The final exam will encompass the material from the latter part of the course but may also include some questions covering key topics from all sections of material covered during the semester. Make-up exams will be given only with valid written university-related excuses. Make-ups must be done within 3 school days.

I will also be assigning online homework through Mastering Biology. You should have obtained an access code in your textbook package. If you purchased a used book, you will need to purchase an access code. You can register (or purchase) your access code at <http://www.masteringbio.com/site/register/new-students.html>.

The outcome assessment of this course (i.e., your grade) can be summarized as:

Four major exams @ 16% each	→	64%
Final exam		16%
Mastering Biology		<u>20%</u>
		100%

You have the option to drop one exam (NOT including the Final Exam). Exam values will then change to 20% each.

You will have the opportunity to earn bonus points toward your final grade via the iClicker system. You should find a rebate form for an iClicker in your textbook package.

Final letter grades will be assigned according to the following guidelines:

A = 90-100	C = 70-79	F ≤ 59
B = 80-89	D = 60-69	

Although there will normally be some ‘extra credit’ questions on each exam, I will not accept any ‘extra credit’ reports or other special projects for the purpose of elevating grades.

In addition, I reserve the right to assign “minus grades” when rounding up to the next grade level. For example, a grade of 79 may be assigned as a B- instead of a C based on my assessment of your overall contributions to the class, which may include such things as attendance or whether or not this course serves as your morning naptime.

#### Classroom Expectations and Etiquette:

While I would hope that this information would be self-evident to most of you, I have learned over the past few years that some individuals need to be made aware of certain behaviors that are not acceptable in a university classroom.

1. All cell phones are to be turned off or set to vibrate before I begin to lecture. If a cell phone rings, I will cease the lecture and wait for you to turn off your phone or exit the room. DO NOT answer your phone and carry on conversation during class. If you are texting, you are not paying attention and therefore wasting the money somebody (you? parents? taxpayers?) paid for you to be here. Cell phones must be turned off and put away for the duration of all exam periods.
2. Laptop computers brought to class may be used for note-taking purposes only. If you want to do your homework for other classes or surf the web, go somewhere else. If this becomes a problem, I will simply ban all laptops for the remainder of the course.
3. If you know ahead of time that you must leave class early, sit near the exit so as not to be a major distraction when you leave.
4. If you come to class late, make your entrance into the room as inconspicuous as possible so as to minimize the disruption you will cause.

Academic Misconduct: Since some of you may not be certain what constitutes cheating at this university, I will point out the definition as found in your student handbook, Part IX, Section B:

“Academic misconduct includes all acts of dishonesty in any academically-related matter and any knowing or intentional help or attempt to help, or conspiracy to help, another student commit an act of academic dishonesty.”

If I have reason to believe cheating has occurred on an assignment, all students involved will receive a grade of “zero” for that assignment.

#### For Students with Disabilities:

MSU Billings is committed to providing equal access. If you anticipate barriers related to the format or requirements of this course, please meet with me so that we can discuss ways to ensure your full participation in the course. If you determine that disability-related accommodations are necessary, please contact Disability Support Services (657-2283; located in the Academic Support Center). We can then plan how best to coordinate your accommodations.

## Class Schedule

<u>Week</u>	<u>Topic(s)</u>	<u>Chapter: (Sections)</u>	<u>Noteworthy Events</u>
1	Scientific Method/ Organization of Life	1: (1.1-1.8)	
2	Chemistry	2, 3: (3.1-14)	MLK Day
3	Chemistry cont. Cells Cells cont.	3 4: (4.1-18) 4: (4.20- 22); 5: (5.1)	
4	Membrane Transport Energy Flow	5: (5.2-9) 5: (5.10-16)	<b>Exam I (Ch. 1-5.9) 2/04</b>
5	Photosynthesis Cellular Respiration Cell Division	7: (7.1-11) 6 8: (8.1-9)	
6	Meiosis/Cancer Genetics Hereditary Disorders	8: (8.10-19); 11: (11.18-20) 9 8: (8.20-23); 9: (9.9; 9.10; 9.22)	
7	DNA Transcription	3: (3.16); 10: (10.2-10)	Presidents' Day <b>Exam II (Ch. 5-9; 11) 2/23</b>
8	Spring Break		
9	Translation Genetic Engineering Evolution Natural Selection	10: (10.11-17) 12: (12.1-6; 12.11-13; 12.15-16) 1: (1.6); 13 13, 14, 15: (15.4-6)	
10	Natural Selection cont. Bacteria	16: (16.1-8)	<b>Exam III (Ch. 3; 10-15) 3/18</b>
11	Protists Taxonomy/Fungi Evolution of Plants	16: (16.11-21) 15: (15.15; 15.19); 17: (17.14-21) 17: (17.1-13); 31	
12	Plant Structure/Function Animal Phyla Circulation/ Respiration	17, 31 18 22, 23	
13	Animal Digestion Animal Reproduction	21 27	<b>Exam IV (Ch. 16-31) 4/04</b>
14	Ecosystems	34, 36, 37	
15	Ecosystems and Environmental Impact	34, 38	Mini Break
16	The End		<b>Final Exam 4/25, 10:00 AM</b>

\* Exam dates may be moved at the discretion of the instructor.