Instructor: Mrs. Andrea Garrison  
Office: SE-43A  
Phone: 395-4262  
Email: agarriso@bakersfieldcollege.edu  
Office Hrs: MTWTh 8:15-9:15am; M 11:00-11:30am  
Website: www2.bakersfieldcollege.edu/agarriso


Required lab supplies: stapler, calculator, pencils, eraser.  
Prerequisite: Reading level 5 or 6  
Publisher's website: www.masteringbiology.com

Tentative Schedule: *(Bold, italicized reading assignments are for lab; test topics are approximate)*

<table>
<thead>
<tr>
<th>DATE</th>
<th>TOPIC</th>
<th>READING</th>
<th>LAB for the week</th>
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<tbody>
<tr>
<td>Jan.</td>
<td>Intro/ Nature of Life</td>
<td>Ch. 1</td>
<td>P. 285-289 <strong>Owl Pellets</strong></td>
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<tr>
<td>22</td>
<td>Nature of Science</td>
<td>Ch. 1.</td>
<td>Measurements &amp; Exponents;</td>
</tr>
<tr>
<td></td>
<td>Communities and Ecosystems</td>
<td>Ch. 20*</td>
<td><strong>Learning Styles due</strong></td>
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<tr>
<td>Feb.</td>
<td>Comm&amp;Eco/Future of Biosphere</td>
<td>Ch. 20</td>
<td>Circ Physiology**</td>
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<tr>
<td>3</td>
<td>Future of the Biosphere</td>
<td>Ch. 18*</td>
<td><strong>Learning Styles due</strong></td>
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<tr>
<td>5</td>
<td>EXAM I (thru 2/5)</td>
<td>Microscope/Cells</td>
<td><strong>Circ. Physio. due</strong></td>
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<tr>
<td></td>
<td>Cell Structure</td>
<td>Ch. 4*</td>
<td><strong>Cell Respiration</strong></td>
</tr>
<tr>
<td>10</td>
<td>HOLIDAY</td>
<td>P. 83-87</td>
<td><strong>Nutrition Due</strong> as quiz</td>
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<tr>
<td>17</td>
<td>Cell Structure/Membranes</td>
<td>Ch. 3</td>
<td><strong>Nutrition</strong> (bring analysis)</td>
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<td>19</td>
<td>Mitosis &amp; Meiosis</td>
<td>Ch. 8*</td>
<td><strong>Sol&amp;Osmosis/Diff due</strong> REV SESSION</td>
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<tr>
<td>24</td>
<td>Cell Membranes</td>
<td>Ch. 24</td>
<td><strong>DNA</strong></td>
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<td>26</td>
<td>Plants/Cell Respiration</td>
<td>Ch. 28, 29</td>
<td><strong>Flowering Plants</strong></td>
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<tr>
<td>10</td>
<td>Digestive System</td>
<td>Ch. 28, 29</td>
<td><strong>Cell Respiration due</strong></td>
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<td></td>
<td>Circulatory System</td>
<td>Ch. 22</td>
<td><strong>Reprod. &amp; Birth Control</strong></td>
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<td>17</td>
<td>Lymphtic/Immune Systems</td>
<td>Ch. 24</td>
<td><strong>STDs &amp; Their Epidemiology</strong></td>
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<td>31</td>
<td>Genetic Apps/Immunology/Biotechnology</td>
<td>Ch. 11, Ch. 9</td>
<td><strong>Marriage Lab/Genetics</strong></td>
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<td>Apr</td>
<td></td>
<td>Ch. 12*</td>
<td><strong>Cracking the Code of Life due</strong></td>
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<tr>
<td>14</td>
<td>SPRING BREAK</td>
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<td><strong>REVIEW SESSION</strong></td>
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<tr>
<td>19</td>
<td>Natural Selection/Speciation **Last day to turn in projects, extra credit, late work</td>
<td>Ch. 13, 14*</td>
<td>CALM**</td>
</tr>
<tr>
<td>21</td>
<td>EXAM IV (thru 4/9)</td>
<td></td>
<td><strong>Red Queen</strong></td>
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<tr>
<td>23</td>
<td>Evidences for Evolution</td>
<td>Ch. 13, 14</td>
<td><strong>CALM due</strong></td>
</tr>
<tr>
<td>28</td>
<td>Population Biology</td>
<td>Ch. 19*</td>
<td><strong>Species Interactions</strong></td>
</tr>
<tr>
<td>30</td>
<td>Species Interactions</td>
<td>P. 428-432</td>
<td><strong>Human Population Growth</strong></td>
</tr>
<tr>
<td>May</td>
<td>Human Population Growth</td>
<td>Ch. 19</td>
<td><strong>REVIEW SESSION</strong> for Final</td>
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<td>5</td>
<td></td>
<td></td>
<td>**NOTE TIME: 10:00-11:50am</td>
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<tr>
<td>12</td>
<td>FINAL EXAM</td>
<td></td>
<td>**Chapter Review due; **after topic indicates homework assigned; **before &amp; after topic indicates it is due</td>
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</tbody>
</table>

*LAST DATE TO DROP WITHOUT "W" IS 2/3; LAST DATE TO DROP WITH "W" IS 3/28*
PUBLISHER’S WEBSITE
Pearson Education, Inc., operates the website Masteringbiology.com. This website offers access to a variety of excellent study tools, as well as an online version of your textbook. I will not be assigning homework for a grade from the website, but I highly recommend you register and use the study helps. Free access to the website comes with your purchase of a new textbook from the BC bookstore. If you do not plan to purchase a new textbook from the bookstore, you may purchase access to tutorials, etc., online by going to the website and registering as a student. The cost of purchasing access to the tutorials is $51.45. You may purchase the eText as well as access to the tutorials for $85.80. DO NOT PURCHASE THE VIRTUAL LABS.

BLOOM’S TAXONOMY
Thinking is something you will be asked to do a lot of at Bakersfield College or any institution of higher learning. You will find that different tasks will require you to use different types of thought processes. Benjamin Bloom developed the hierarchy of thinking which is shown below. The levels at the top of the list are the most basic levels of thought, while those at the bottom are much more complex. While much of the thinking done in elementary and high school may be at the levels of knowledge and comprehension, you will be asked to think more at the application level and above in college.

- KNOWLEDGE - recognition and recall of facts
- COMPREHENSION - summarizing information in your own words
- APPLICATION - applying or using information in a different context
- ANALYSIS - analyzing information to clarify relationships between the parts
- SYNTHESIS - combining facts/concepts to create a new idea
- EVALUATION - using information to make judgments and decisions

EVALUATION OF STUDENT PERFORMANCE
Grades in this course are based on the following:

4 Lecture Exams @ 100 pts.  400 pts.
1 Lecture Final @ 200 pts.    200
15 Lab Participation @ 10 pts. (may drop 2)  130 – 150
13 Quizzes @ 10 pts. (drop 2)  110
13 Chapter Previews @ 10 pts. (drop 1)  120
1 Lab Report @ 30 pts. (Cell Respiration)  30
5 Homework @ 20 pts.         100
   (Learning Styles, Circ Physiology, Solubility, CALM, Cracking the Code of Life),
5 Study Question Sets  50
1 Project (choose from those available on  50
   Mrs. Garrison’s website)  
Other Possible Assignments  ???
TOTAL  1190 – 1210+ pts.

Letter grades are assigned as follows:

A = 90-100%  NOTE: These standards are not subject to change.
B = 80- 89%
C = 70- 79%
D = 60- 69%
F = less than 60%
BIOLOGY 11 COURSE STUDENT LEARNING OUTCOMES

1. Scientific method
The students will be able to research a topic, design experiments, synthesize and evaluate the information, justify and express their opinions.

2. Microscope
The students will be able to 1) properly use the microscope as a tool to study microscopic organisms and cellular structures; 2) gain a perspective of the invisible biological world by using the microscope; and 3) differentiate between the microscope and microscopic objects, discover, locate and compare and contrast size of microscopic organisms.

3. Group work
The students will be able to conduct a lab assignment, dividing tasks, valuing input and collaboration, and producing a final report.

4. Study skills
The students will be able to effectively study, analyze, and evaluate biological information to assemble and articulate scientific data.

5. Critical thinking
The students will be able to analyze abstract information and present related data appropriately so as to arrive at a conclusion based on evidence including, but not limited to graphs computer skills, numerical data, text, lecture, and information from outside sources.

6. Cell theory
The students will be able to identify various cells and their structural components, and differentiate the functions of each of their components.

7. DNA and heredity
The students will be able to 1) understand the significance of DNA as the basis for heredity, structure, function and disease in living organisms; 2) describe the DNA molecule and explain how it is used in living systems to create proteins; and 3) describe how proteins function in living cells.

8. Basic human anatomy and physiology
The students will be able to describe the organs found in selected human organ systems, then explain the role played by each organ in the overall functioning of that system.

9. Diversity of organisms
The students will be able to compare and contrast characteristics of various organisms particularly related to energy sources (feeding style), cellular composition, reproduction and relationship to the ecosystem.

10. Ecology and the environment
The students will be able to 1) describe the flow of energy through the ecosystem, then construct a food web, placing specific species of organisms at each level; 2) choose a common ecosystem disturbance of human origin and predict the effects of that disturbance on a food web and 3) understand the complexity of ecosystems and environmental issues.

11. Real world/Current event applications
The students will be able to 1) recognize, value, and apply major biological concepts contributing to current issues in the biological realm; and 2) apply critical thinking skills to formulate and defend a position on a controversial issue of biological importance.
LECTURE EXAMS
Lecture exams will include multiple choice and written portions. You will be required to come to class prepared with a SCAN-TRON form 882, at least one No. 2 pencil and a good eraser. You must take all exams as scheduled. Do not be late to class. No exams will be handed out after any other student has left the exam room for any reason. No baseball caps, hats with visors or sunglasses may be worn during quizzes or exams. **If you must be absent on the day of an exam, CALL MRS. GARRISON AHEAD OF TIME IF AT ALL POSSIBLE. IF THERE IS NO ANSWER, LEAVE A MESSAGE.***
Make-up exams will be essay exams, and will only be given at the discretion of the instructor (phone call prior to exam or as soon as possible after exam with very good excuse required). Make-ups will be given at a time agreeable with the instructor.

CHAPTER REVIEWS
Chapter reviews are due at the beginning of lecture on the assigned day and students must remain in class to get credit for the preview (see page 6 of this syllabus). Chapter previews are not accepted late, which means they must be on my desk before lecture begins for the day. **SO BE ON TIME TO CLASS AND DON’T LEAVE EARLY!** (Roll may be taken at the end of lecture.) Not every preview will actually be collected. They will be collected on random (unannounced) dates. The lowest chapter preview score will be dropped before calculating your final grade.

HOMEWORK
Homework must be turned in at the beginning of the lab period, unless otherwise indicated. Put your name on the upper right corner and, if there is more than one page, staple the pages (in their proper order) prior to coming to class.
If you are absent from lab with a good reason, you may turn in homework with no penalty at the next lecture meeting, **provided you call Mrs. Garrison (the day you miss lab, if at all possible) and she agrees with your reason.** In such a case, you are responsible for remembering to turn it in to Mrs. Garrison. LATE homework without an acceptable excuse will be accepted, but **5 points will be deducted from the total score FOR EACH DAY THE HOMEWORK IS LATE, (INCLUDING SATURDAYS AND SUNDAYS).**

EXTRA CREDIT
Up to 25 points of extra credit may be earned by completing a second project, or writing summaries of newspaper or journal articles, reliable articles found on internet web sites or TV programs. The article/website/program must be of biological interest. Newspaper articles must be at least 1/5 of a page, journal articles must be at least 1/2 a page (8-1/2" x 11"). Significantly longer articles (twice as long or more) will earn 10 points. Half-hour TV shows receive 5 pts., one hour TV shows receive 10 pts. Each summary must include the title, author, source, length and date of the article/program at the top of the page.

**ALL PROJECTS AND EXTRA CREDIT MUST BE RECEIVED BY 4pm April 21st.** Extra credit projects should be received within two weeks of the date they are done, but no later than April 21st. Late worked being turned in for the privilege of extra credit must also be turned in by this time.

**Extra credit is not meant to replace assigned work. Extra credit points will not be given to students who have not completed and turned in every assignment (this does not include weekly quizzes or chapter previews).**

ATTENDANCE POLICY
*****You must pass the lab to pass the course. Lab exercises provide students with access to materials and practice of skills not available to the student outside of lab. A **student who is absent from more than 3 labs will fail the lab.** You are expected to attend all class meetings. Chronic absenteeism and/or habitual tardiness may result in your being dropped from the class by the instructor. Should you decide to withdraw from the course, it is your responsibility to drop yourself. As a courtesy to fellow students and your instructor, all telephones and beepers must be turned to silent or off before bringing them into the lecture or
lab room, and they may not be answered during class time. Phones must be turned off and in your book bag during exams. If someone needs to contact you in an emergency, they may call campus security (395-4224). An officer will locate you and bring you a message.

**CHEATING POLICY**
Cheating in any form will not be tolerated and will result in zero points for the assignment. Cheating includes, but is not limited to copying/sharing test answers or assignments (or any portion thereof), copying labs, using pre-prepared notes, electronic data or other information not available from your own mind, etc. Continued cheating is grounds for a grade of “F” and/or further action in association with the Dean of Students. Cheating may also be reported to the dean to be kept in student files for future reference.

**SPECIAL ACCOMMODATIONS**
Students with disabilities who believe they may need accommodations in this class are encouraged to contact Disabled Student Programs & Services located at Student Services Building, 1st Floor, Counseling Center (661-395-4334), as soon as possible to better ensure such accommodations are implemented in a timely fashion.

**TUTORING AVAILABLE**
BC students get free peer one-on-one tutoring in the BC Tutoring Center in most subjects. Students get one 50-minute session per subject per week with a tutor who has successfully completed the class and is trained to be a tutor. There is drop-in tutoring in math and English all day long. Come up to the Tutoring Center to schedule an appointment. If you have any questions, please call 395-4430 or check the center out on-line at [http://bcacademicdevelopmentdepartment.weebly.com/tutoring-center.html](http://bcacademicdevelopmentdepartment.weebly.com/tutoring-center.html).

**LABORATORY POLICIES AND PROCEDURES**
1. You must attend lab. Missing more than 3 labs will result in a failing grade for the course. If you must miss lab, please call Mrs. Garrison before missing your lab.

2. Oral quizzes will be given at the beginning of each lab period, covering the previous lab’s material, pertinent lecture material, and background and procedural material for that day’s lab exercise. Questions will not be repeated for students who are late to class.

3. All lab work **must** be done in pencil, unless you are directed otherwise.

4. Points will be given for class participation during each week’s lab. Up to 10 pts. may be earned for each lab, depending on the amount of work done and how correct it is. Wrong answers to tougher questions do not necessarily mean loss of points. Leaving lab early, creating a disturbance during the lab period, or refusing to cooperate, may cost you points. Up to two lab participation scores will be dropped due to absences.

5. The two lowest quiz scores will be dropped before calculating the final grade.

6. Students must bring their lecture text and lab manual to each lab class. If you come to lab without the manual, you will not be allowed to participate (or earn participation points). **You MAY NOT** share a lab manual with another student or borrow a manual to photocopy during class time. Photocopying a manual may be done before class.
7. Students must pass a safety test during the third week of the semester in order to continue attending lab (which is required to pass the course.)

8. No eating, drinking or smoking is allowed in the lab.

9. You must wear shoes at all times in the lab.

10. Students are expected to keep their work area and the classroom area neat throughout the period. Do not leave paper towels, etc., on the counters or desks. Students will take turns cleaning the lab at the end of each period.

11. You will sign a Student Agreement indicating that you understand and agree to the conditions in this syllabus. Be sure to read and understand what is expected of you BEFORE signing the agreement. If you do not understand any part of this syllabus, ask the instructor about it.

CHAPTER PREVIEW ASSIGNMENTS (10 pts. each)

The purpose of this assignment is to encourage students to be in class on time, having read the chapter, ready to discuss the subject matter and ask informed questions.

Chapter previews must be completed and ready to turn in at the beginning of class on the date indicated below for each chapter. Every preview will not be collected. They will be collected on random dates. If your preview is not turned in at the beginning of class the day it is collected, you will receive a zero for that assignment. One (lowest score) preview will be dropped for the semester. Previews will not be accepted early or late. Students must be in class and remain in class to get credit for the preview.

Complete the following assignment before you read the chapter. The assignment must be typed.

At the top of your assignment, include your name, day your lab meets, chapter being previewed and whether you are working with the 3rd or 4th edition of the textbook.

1. Write down what you know from prior experiences about the subject of the chapter.

2. Write down 3 questions of your own that you want to know about the subject of the chapter.

3. Look through the figures in the chapter, then find 10 figures that capture your interest, read the caption and briefly explain each figure in your own words. Identify the figure with the chapter and figure number at the beginning of your explanation.

4. Now READ the chapter.

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<th>DUE DATE</th>
<th>PREVIEW</th>
<th>DUE DATE</th>
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<td>Ch. 18</td>
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<td>Pp. 494-506</td>
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<td>Ch. 4</td>
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<td>Pp. 83-87</td>
<td>Feb. 19 (5 figures required)</td>
<td>Ch. 12</td>
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<td>Ch. 8</td>
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<td>Ch. 6</td>
<td>Mar. 5</td>
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