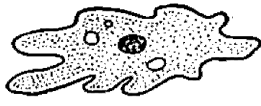
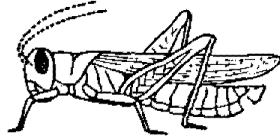


Biology 11 Concepts of Biology

Sierra College - Summer 2008



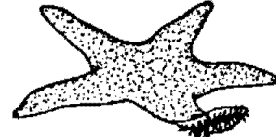
Amoeba



Insect



Mammal



Star-fish

Welcome to Biology 11!

In this course we will be focusing on the biological principles which are fundamental to understanding yourself and the world in which we live. As humans we are all biological specimens so it is important for all of us to have a general understanding about life. Biology is one of the most exciting disciplines! Some of you may laugh when you read that statement but, I think you will find that you already use biology and can apply it to your everyday life more than you realize. We all will have to make decisions about our health, coexist with other organisms that share our environment, and make educated choices as consumers and voters.

This is an introductory course to biology, but don't expect it to be too easy. A science class should develop your critical thinking, problem solving, data analyzing, and observational skills. Be prepared to learn a lot of new terms and concepts. You will have to invest some time and effort in order to succeed. More so since you have signed up to take biology in the summer. That means we will cover in **six** weeks what is usually covered in sixteen weeks during the regular semester! I encourage all of you to get to know your peers and collaborate with each other. Each of us comes from a unique background and has had different life experiences. We can all learn something new from every single person in this class. I expect you to respect one another and create a classroom environment where all students feel comfortable participating and sharing their thoughts. Finally, my overall goal in this course is that you will gain a deeper appreciation for biology and we will have a lot of fun together over the next few weeks!

Sincerely,

Keri Muma

Instructor: Keri Muma

Office: Sewell Hall room S-120

Phone: (916) 781-7112

Email: kmuma@sierracollege.edu

Contacting your Instructor and Office hours: I will be online and available through the Blackboard chat room from 5:00 pm – 6:00 pm Tuesday and Wednesday for you to ask any questions. To access the Blackboard chat room select “Communication” and then “Collaboration”. You can also use this feature to chat with your classmates. I will check my email occasionally throughout the day and on weekends. At the least, you can count on a response from me within 24 hours. I will check my email once in the morning and once in the evening on weekdays and on Sunday evenings. Let me know if this does not work for you, I am open to suggestions, but unfortunately I can't promise to be available 24/7 :) I will also be available if you would like to meet in person at my office Tuesday through Thursday from 5:00 – 6:00 pm before our lab session. If you need to meet with me at a different time just let me know ahead of time so we can set up a meeting.

Course Format:

"Concepts of Biology" is a 4 unit lecture/lab class designed to introduce students to the unifying concepts of biology and our relationships to the environment. It is primarily offered to students who are non-biology majors in order to meet their general education requirements. It also serves as an entry-level course for any student contemplating becoming a biology major.

This section of Bio. Sci. 11 is being taught as an online hybrid class. Online hybrid means that class lecture materials and assignments will be posted online but we will also meet in person three times a week on the Rocklin campus for a 3 hour lab class. **Lab sessions will be held in room S-112 Tuesday through Thursday from 6 - 9:05pm.** Please review the schedule and make sure you will be able to attend these **required** class sessions. In these sessions you will have the opportunity to interact with your classmates and instructor to apply course concepts in a hands-on laboratory experience.

Often online learning can be more challenging. In order to succeed in online courses students need to be self-motivated and self-disciplined because there is less enforced structure. This online class utilizes Sierra College's Blackboard Distance Learning Site. When you enroll as an online student you **MUST** complete the Blackboard orientation materials, if you have not done an online class before. **As an online student you must have frequent and reliable access to the Internet (using a Web browser), a computer, and an email system capable of delivering and sending attachments. You will also need a relatively current version of Microsoft Word or an equivalent word processing software** that is able to read Word files accurately (including any embedded pictures and illustrations) and able to send either Word files or a text document in "Rich Text Format" (RTF). To determine if you have the appropriate programs and technology to be successful in an online course, please view the following Web site for general online information and Sierra College's Blackboard Requirements: <http://lrc.sierra.cc.ca.us/dl/> Without this information you will not be able to access class instructional materials (lectures, announcements, assignments, quizzes, etc.) Please contact me if you have questions after view the orientation material.

Required Textbooks:

For this class, there will be a required textbook to be used to enhance your understanding of the topics and to use as a reference as needed. Primarily the text is required for background reading and to provide you with additional information to better understand the concepts covered in the lectures posted online. The textbook is available with or without a CD. It is not required to buy a book that contains the CD, since none of your assignments will involve the CD. However, I think you will find the practice exercises, animations, and other materials very useful, and I will refer to exercises from the CD that you may find helpful during the semester, but these exercises are not required.

The textbook for this class is "**Essential Biology**" – 3rd Edition, by the authors: **Campbell, Reece & Simon** - ISBN # 0-8053-6842-6. There is also an older 2nd edition out there that would also work if you are looking for a cheaper option. However, some of the page numbers that I refer to in your lectures may be different. There is also a copy of the textbook on reserve for students to use at the library on the Rocklin campus.

In addition to the textbook, you will also be required to purchase a lab manual for the laboratory portion of this class. The lab manual for this course is: "**Concepts of Biology Lab Manual**" by **Elena Pravosudova, Michael B. Clark, and Michael R. Riddle**. **You need the lab manual for your first lab meeting!** You will be recording data and answering questions in this manual as you carry out your labs. You will also be turning in completed portions of your lab manual for points. It is important that you purchase it ASAP because we will start using it as soon as the first lab meeting. The lab manual can be purchased at the Sierra College Rocklin campus bookstore.

Attendance

For your online lecture portion I would encourage you to log in to Blackboard **at least** three days each week or as necessary to participate, check announcements, keep your work current and complete your assignments. Some recommend that the participation standard should be set at five days per week however you just need to participate and reserve enough time to do the assigned work and interact with your fellow students. Your frequent participation, emails and submitted assignments will be our attendance tracking. The strength and value of this online class rests largely with you. The more you participate and bring information to share, the better the class experience will be for all of us. There will be required assignments that you need to complete on a timely basis in order to achieve the class points possible for each task. I reserve the right to drop students for a serious lack of participation and progress on assigned work. Please notify me if you have a circumstance that requires your absence from the course for any length of time. If your priorities are elsewhere, such as work or other commitments, please do not attempt to do both. If you decide to drop this course, YOU ARE RESPONSIBLE for filing the appropriate forms by the drop deadline. Do not assume that I will drop you from the course. For procedures and deadlines refer to the current Sierra College catalog.

Lectures: posted online

In this course we will follow a weekly schedule. All your lectures, which will be in a text format, and assignments for each week will be posted online Monday morning by 9:00 am at <http://sierracollege.blackboard.com/> under the "learning units" link. Each week's readings and assignments will be grouped into a folder for that week. For example, this week when you go into the "learning units" button on the course menu you will see a folder labeled Week 1. When you click on this folder you will see folders for each chapter we will be

covering that week. Each chapter folder will contain all of your tasks and assignments for that chapter. You will have from Monday morning when the material is posted to Sunday at midnight to complete each week's readings and assignments. It is your responsibility to do the weekly readings and complete the assignments at your own pace. However, don't procrastinate until the end of the week to do everything in one night, it is too much. Keeping up with your studies is a key to success in this class! However, please communicate with me ASAP if you have an emergency or situation that prevents you from meeting a weekly deadline.

How to Submit Assignments

Assignments will be included in your weekly folders. The number of assignments may vary from week to week. Your assignments need to be saved as a Word (.doc) or Rich Text Format (.rtf). *Note: At this point I cannot open the new Word 2007 .docx files so please save it as a .doc instead.* There will be a link for you to download the assignment instructions and homework should be submitted through the "view/completed homework" link for each assignment in Blackboard. Submitting homework on Blackboard is similar to attaching a file to email. I prefer that you use the completed homework button to submit your work since it is easier for me to keep track of your work. You can also check to see that your work has been submitted in the "grade book". Submitted work will appear in the grade book as a "!" until I grade the work and then you will see your point value. In the case of an emergency you can email your assignment to me at kmuma@sierracollege.edu however, you may have to remind me that you sent it to my email instead of submitting it through Blackboard. Remember to follow all directions, restrictions, procedures and requirements if you want to maximize your points on each assignment. If you make an error of any kind, communicate with me immediately to resolve the problem. Late assignments will only be accepted within 24 hours of the due date and can only earn a maximum of half credit. After 24 hours.....no credit! To maintain fairness to all students, this policy will be enforced at all times.

Discussion Board

In addition to lectures and assignments, every week you will be expected to participate in discussions. The discussion board allows you to interact with your classmates and share ideas on topics that we would discuss in a traditional classroom setting. You will need to respond to **three** of the 8-9 questions posted on the course Discussion Board per week. It is up to you to choose which three you would like to discuss. (Three may seem like a lot but remember; in summer school we will be doing approximately 3 - 4 chapters a week instead of 1 per week done in the normal semester so it is a faster pace). I also encourage you to respond to at least one posting made by your classmates.

You will earn up to 3 points per question you answer and 1 point for responding to classmates. One of your responses for the given week needs to be posted before midnight on Wednesday and then the remainder of your responses have to be posted before midnight Sunday of that week: otherwise 10-total points for the week will not be given (3 questions X 3 points each, plus 1 points for responses = 10 points total).

In order to receive full credit on the discussion board:

- Contributions must be unique and in your own words. **DON'T even think about cutting and pasting information from other websites!** You can however, include links to where you found the info and post pictures that you find online but all written material must be your own.
- Responses must be carefully considered and thorough answer to the question posed. You must THINK and your response must have substance! You will not receive credit for one sentence answers such as “yeah, I agree”.
- If your response is underdeveloped or off topic it will not receive credit for that week’s discussion board.

How to use the discussion board:

- Click on the “discussion board” tab in the course menu. This will bring you to the discussion board where you will see the questions for the week.
- To POST a response click on the topic of the question you wish to answer. Then click “Thread”. This will bring you to a page that has a text box which you can type your response in. Remember to type a “title” to your post in the “subject” box. Some people prefer to type their responses in a word document and then cut and paste it into the text box. This way you can save it to your computer, in case your response gets lost due to technical difficulties. When you have completed and proofread your response, click “submit” at the bottom of the page.
- To READ other student’s posts, click on the title of their post and their response will open on a new page.
- To RESPOND to another student’s post, click on the “reply” when you are reading their post.

Online Etiquette

At all times, during discussions and other class activities, please observe reasonable and common etiquette standards while online with your classmates. We need to respect the right of others to have their own views and perspectives, value the variety of experiences, and diversity of values that each of our independent thoughts bring to this class. Also keep in mind when receiving comments from other students that we interact with one another with the intent not to offend. Here are a few guidelines we all need to follow to ensure a positive learning environment for all:

- NO offensive language, put-downs, or hateful speech will be tolerated.
- If you wouldn't say it in the classroom setting, don't say it.
- Give people the benefit of the doubt and ask for clarification before responding.
- Discussion boards can be informal writing, similar to how you would speak in class. However, your posts and communications need to be legible and all words need to be spelled out. Do not treat discussion boards like texting.
- For additional “netiquette” check out <http://www.albion.com/netiquette>

Failure to behave reasonably and appropriately will have negative consequences, including removal from class discussions as necessary. Please, help promote openness, understanding and diversity in perspectives and views by encouraging each other to participate. We all come to this class with differing levels of knowledge and a wide variety of background experiences to share. Please help me to create an environment where everyone has something to add, share and learn. Please remember that this is a science class and our studies should generally be focused upon the principles of biology and its application to our lives and our society.

Integrity and Independent Effort

Although most of the work for this class will occur at your home and the sharing of information, ideas, and concepts are encouraged, final products (any quizzes, assignments, etc.) that you submit or turn-in for credit **must be in your own independent work, in your own unique words**. Copying portions of text from others or sites on the Internet, inappropriately without quotes and credit, will result in a zero for the assignment or dismissal from class. If you work with others in class, work together to understand the concepts and not to supply answers to a specific assignment. You are responsible for doing your own work and not copying directly from any other source and you are ultimately responsible for what you turn-in for grading. If you use the Internet or other sources, appropriately cite the sources so that others can find the information also. Just as with other classes, cheating in any form will not be tolerated and the college's policies on honesty and independent work will be followed, and may include automatically signing an "F" grade " with a notation on your transcript that the grade resulted from academic dishonesty.

Class Notebooks & Electronic Record-Keeping

I advise students to maintain a neat, organized notebook. A complete set of notes, hand-outs, drawings and assignments will provide the best source of information to study for exams and quizzes. You may prefer to print all the documents off line and then keep them in a notebook or you may prefer to create an electronic "notebook" or folder on your computer for all your work associated with this online class. It is important that **you keep a copy** of all assignments, papers, emails, discussion board responses, and all other materials associated with your participation in this class in case you need to provide them to your instructor as requested to verify any missing assignments or correct any errors. Due to technology, errors can easily occur when emailing, sending electronic documents, grading and recording assignments. Although I will make every effort to be accurate in recording points, I'm not perfect and I am often receiving many different assignments at different times. Please help your instructor with keeping track of assignments, **by labeling all files descriptively and correctly (with your name and assignment title)** so I will know what they are and from whom they came. Also promptly check your progress as soon as grades are posted on the Blackboard site to make sure your work has been recorded.

Examinations

Examinations and quizzes will take place online through Blackboard. However, you must be available to come to campus to take the test if you experience any technical problems. There will be seven sectional exams that will assess your understanding of the subject matter covered in posted lectures, assignments, and in the textbook. Basically, you will have a test each week that will cover 3-4 chapters. This may seem like a lot of tests but trust me, three chapters per test will be easier for you to manage than if we did them every two weeks and you had to cover six chapters! The exams will consist of multiple choice; fill in the blank, matching, short answer and essay. **Exams will be posted at the end of each week on Thursday and be available through Monday. It is your job to make sure you will be available to complete the exams on the weeks they will be posted before you continue in this course.** Exams that are not completed by the deadline will automatically result in a grade of zero for that exam. Because your examinations will be available for a few days there will be **NO make-up tests**.

You will have 1 ½ hours to complete each exam. You will only get **one attempt** so please do not click on the test until you are ready to take the exam! Your exams are timed so you must be prepared for the exam and have studied the material being assessed. If you assume you will be able to look up all the answers you will run out of time. Once you have completed the exam, only your score will appear. You will not know which questions you missed. This is necessary to ensure that all students receive equal treatment in taking the test. If you wish to go over the test after all students have completed the exam, please contact me and the answers will be made available.

Please communicate with me if you have an emergency or problems with your test. Don't freak out! I will contact you as soon as I get an opportunity and we will make arrangements to work something out. **If you unable to complete the exam (for any reason) in one attempt your instructor can required you to come to Sierra College to take the exam.** I realize that this policy may place a hardship on some students but it is very important in keeping the online testing arena as equitable and fair as possible. I suggest you take the following measures to avoid the online exam/quiz from closing/freezing on you:

1. Make sure you are using a reliable high speed DSL or cable internet connection
2. Do not try to print any part of it
3. It may close if you do not move your mouse or press any keys for awhile
4. Do not attempt to backtrack or open additional screens
5. Do not press the "save" button at the bottom of the test screen, only press the "submit" button when you are done.

Quizzes

Following each topic/chapter you will have a practice quiz that will be posted. These quizzes are for you to assess how well you have comprehended the material and what areas you may need to work on before your test. They are only for practice and are NOT for a grade! However, students that make a valid attempt on all quizzes will receive 5 extra credit points at the end of the semester. Your quizzes will be based on the lectures and reading assignments for that chapter. These quizzes can be taken anytime during the week once you finish your readings and feel comfortable with the information. You may have a few quizzes that will be for a grade such as your "syllabus quiz".

Laboratory Sessions

In lab you will have an opportunity to study material hands on and carry out the biological principles we discuss online. For most of the labs you will be working in groups so you can help each other, share ideas and learn from one another. You are **required** to read the material in your lab manual for the upcoming week **prior** to coming to the lab, and to **write up** a one-paragraph "pre-lab report" which briefly describes the upcoming lab exercises **in your own words**. Working on a pre-lab report will help you familiarize yourself with the lab material. This way you will benefit from the lab exercises a lot more. Trust me; it makes a huge difference when you come prepared! **All pre-lab reports must be typed.** If for some unforeseen reason you are unable to type your report you must email or contact me prior to lab period to let me know your situation.

As for me, I will initial your pre-lab report at the beginning of each lab. It is your responsibility to make sure I do initial it, because you will not get credit for your pre-lab report if it is not signed! After you are finished with the exercises in class and have recorded all the data and/or finished with observations and drawings, answer the questions in your lab report found in the back of your lab manual. We will then have a discussion at the end of lab to help you focus on the main ideas of the lab and to make sure that you understand the

concepts. This is an important part of your lab and will help you prepare for your exams so I expect you to stay through the discussion to receive your lab participation points. You will be turning in the signed pre-lab report and the lab sheets stapled together **when you come to the following lab class**. You will receive a total of 10 points for each lab (for your pre-lab, participation in discussion, and lab summary questions). You must be present to make observations and conduct experiments to receive credit. There are **no make-up labs**. However, your lowest lab score will be dropped to account for emergencies. There will be no separate lab tests, but the questions related to the lab material, as well as to any supplementary sources (e.g. films that we watch in class and some of the weekly DB topics) will appear on exams.

Be respectful of all lab equipment. You are responsible for cleaning your lab table and returning all study items to their proper place after use. It is important that you follow all safety procedures and properly dispose of chemical and biohazard materials, and treat live specimens humanely and with respect. I reserve the right to deduct points for improper care and clean up of lab equipment. Please notify your instructor of any breakages or broken supplies immediately.

****Please note:** This lab utilizes materials that contain latex. Please let me know if you have an allergy to latex.

Grading

Your final grade in this course will be determined by the total number of points you earn on examinations, quizzes, discussion board, assignments, labs, etc. during the semester. To calculate your grade, total up the number of points you have earned and divide by the total number of points possible up to date. You will need to keep track of the points you have earned on all returned assignment in order to calculate your grade at any given time. **You can keep track of your grades by checking the “My grades” link under Tools on the Blackboard.** The points accumulated will contribute to your final grade in the following proportions:

Components	Total
Lecture Exam (7 @ 60 points each)	420
Quizzes (1 @ 10 points each)	10
Discussion Board (7 @ 10 points each)	70
Assignments (variable)	~100
Routine Labs (14 @ 15 points each)	210
Total Points	~ 810

The total number of points accumulated during the semester will be converted to a final percentage that corresponds with the letter grades found in the table below:

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

Keys to success in Biology 11

Each of you has the ability to succeed in this course as long as you are committed to putting in the study time and hard work. Although this course is challenging, it will also be fun and exciting. The following techniques can be useful in any class where the vocabulary is new and a large volume of information is being presented:

- 1. Be sure you have not overloaded yourself!!** Students will be expected to spend a minimum of 2 hours outside of class for each hour of lecture and a minimum of 1 hour outside of class for each hour of lab to earn an average grade – C. Since this is a summer course we are cramming 16 weeks into 6 weeks so you are more than doubling the amount of time you would be in class a day compared to a regular semester. In summer sessions you would have 9 hours of lecture and 9 hours of lab a week! Therefore, **plan on spending at least 27 hours / week outside of class studying in addition to the 18 hours already spent in class reading lecture/textbook material.** WOW, that is 45 hours which is more hours than having a full time job! THIS IS REAL, BELIEVE ME! I just want you to be aware of the commitment you make when you sign up for a 6 week summer course.

An area in which students most frequently have problems is over-committing their time. Very few people can sustain commitment to excellence if their fixed time exceeds 54 hours per week. Use the following chart as a guide to your time commitments:

Work/Family/Activities	Units/ hours in class	Estimated study time	Total hours/week
40	6	12	58
30	9	18	57
20	12	24	56
10	15	30	55
0	18	36	54

- 2. At the beginning of each week you will receive study objectives.** Use these as a guide for what will be included in lecture and what to focus on for quizzes and exams. **You should use a combination of your notes, textbook, the internet and study partners as sources to answer your objectives.** However, make sure you are using your own words. You will recall your own words better than mine or the author of your textbook.
- 3. Stay on top of your studying.** Review material each day while it is still fresh in your mind. If you wait until the day before the exam to study, you will find that there is too much information to cram in a short amount of time.
- 4. Schedule regular quality study times for yourself and stick to it.** Eliminate distractions and focus on studying. Sitting in front of the TV with your book open is not quality studying time. Play hard, study intensely, but don't try to do them both at the same time. Study when you are alert and have energy, not when you are tired and sluggish.

5. **Note any questions you have** or concepts you are having trouble understanding, so you can ask about them. You can email me or post questions to the help discussion board. Most likely other students have the same questions.
6. Write out terms, say them aloud, sketch or color structures and concepts. It is time consuming but it is repetition and reinforces learning. Use your lecture notes, textbook, assignments and CD to fill in any gaps in your notes. Try writing concepts and ideas in your own words or think of creative ways for you to remember the material. Remember **the more senses you use in studying, the more opportunities there are for the information to sink in.**
7. Even though this is an online course you can still **form study groups with fellow students.** Find another 2 or 3 people whose study styles are congenial with yours and you can share emails and/or phone numbers so you have someone to go over course info with or to ask questions. Get together at least once a week to study and quiz each other. Don't make your study group too big – logistics get difficult with too many people. Don't hesitate to join another group if your study group turns out not to have compatible study styles or speed. In turn don't take it personally if someone decides to join another group. Study styles DO differ and it's important that what you do works for you.
8. **Please come and talk to me immediately if you are having problems.** Don't delay in getting help when you need it.

Well, that is it for now!
Good luck and I look forward to working
with all of you this semester!