Mt. San Antonio College, Biology 1: General Biology
Course Syllabus (details may change), Fall 2014

WELCOME TO BIOLOGY! When you have questions, please do not hesitate to ask. I would like everyone to be a successful biologist this term. We will cover a wealth of material, and time is scarce. Your active participation in learning both in and out of class is essential!

Instructor: Chris Briggs, christopher.briggs@mtsac.edu, 909-274-5808 (If I am contacted after Thursday afternoon, I may not reply until Monday morning.)

Born: Riverside, California – near Box Springs Mountains
College: UC Berkeley, B. S. Environmental Sciences, rowing team, *a cappella*, lived in housing co-op
Graduate School: UC Riverside, M. S. Entomology, juggling club, Chamber Singers
Other Jobs: Lab Assistant, Environmental Educator, Substitute Teacher, Tree Planter, Preserve Manager

Student Hours: MW 1 – 2:30pm, Tu 11 – 12, and at other times by appointment (office in bldg. 60 – room 2110, or I will be nearby). I set aside this time just for you, so please feel free to stop by.
Lecture: TuTh 1:15 – 2:40 pm (meets in 61-2320)
Lab: Tu (course #22036) or Th (#22037) 3:00 – 6:10 pm (meets in 7-1115)

Website: http://faculty.mtsac.edu/cbriggs and MoodleRooms

Week	Date	Lecture Topics	Reading	Lab
1	Aug 26	Introduction to Biological Concepts	Ch. 1	1: Mt. SAC CSI
	Aug 28	Introduction to Biological Concepts; Quiz 1	1	
2	Sept 2	Basic Chemistry; **Field Obs. #1 due**	2	2: You Are What You Eat!
	Sept 4	Molecules of Life (9/5 add deadline)	3	
3	Sept 9	Cell Structures; Quiz 2 (9/8 deadline to drop without W)	4	3: The Cell & Metric Syst.
	Sept 11	Cell Physiology; **Field Obs. #2 due (optional)**	5, 6	
4	Sept 16	Cellular Respiration	7	4: How Things Move (HH)
	Sept 18	Photosynthesis, quick review; Quiz 3	8	
5	Sept 23	Plant Basics; **Rev. Qs due**	24, 25	5: Cell. Resp., Metab. Rates
	Sept 25	**Exam 1** (Ch. 1-8)		
6	Sept 30	DNA / Protein Synthesis	13, 14	6: Plants & Photosynth. (H)
	Oct 02	Mitosis / Cancer; **Critique phase 1 due**	9, 10, 12	
7	Oct 07	Meiosis; Quiz 4	10, 11	7: Biodiv. & Taxonomy (H)
	Oct 09	Genetics	11, 12	*Dress for outdoors*
8	Oct 14	Evolution	16, 17.1-17.4	**Lab Midterm** (on labs 1-7); 8: DNA, Prot. Synth., Biotech.
	Oct 16	Evolution; **Critique phase 2 due**	18.1-18.4	
9	Oct 21	Survey of Life; Quiz 5	20, [21-24]	9: Genetics
	Oct 23	Survey of Life	20, [21-24]	
10	Oct 28	Population Ecology; Quiz 6, **Rev. Qs due**	34	10: Macroevolution
	Oct 30	**Exam 2** (Ch. 9-18); (10/31 deadline to drop with W)		
11	Nov 04	Population Ecology	34	11: Microevolution
	Nov 06	Communities and Ecosystems; **Response phase 1 due**	35	
12	Nov 11	Veteran's Day Holiday (no classes)		12: Pop. Growth, Diseases
	Nov 13	Respiratory & Circulatory Systs.; Quiz 7	26, 31, 30	
13	Nov 18	Homeostasis & Endocrine Syst.	28.1-28.5	13: Human Resp. & Circ. (G)
	Nov 20	Digestive System; Quiz 8	TBA	
14	Nov 25	Reproductive System; **Response phase 2 due**	33.1-33.4	14: Human Senses (G)
	Nov 27	Thanksgiving Holiday (no classes)		
15	Dec 02	Catch-up; Quiz 9		**Lab Final** (on labs 8-14); 15: Ecology, *outdoors*
	Dec 04	Review; **Rev. Qs due**		
16	Dec 09	**Comprehensive Lecture Final Exam** (1:30-4pm)		12/09 and 12/11: Lab 4:30 – 7pm; Discussion / debate

(H) This lab needs a hypothesis written before coming to class; HH means it has 2 hypotheses
(G) This lab has dissection; a few latex gloves will be provided.

Catalog Description: Major principles and concepts, including cellular biology, energy relationships, biological systems, heredity, evolution, and ecology for non-science majors. 4 units. Degree applicable, CSU, UC. Prerequisite: ENGL 67.

Objectives: Upon completion of this course, my goal is for all students to be able to:

1. classify the molecules of living systems and apply basic principles of chemistry to their interaction.
2. relate cell structure and physiology.
3. compare and contrast the processes of photosynthesis and cellular respiration in terms of energy transformation in cells.
4. evaluate how life forms duplicate, maintain control, and exhibit hereditary patterns.
5. summarize the various types of evidence used to examine evolutionary principles.
6. assess how population and community dynamics are affected by ecological interactions.
7. describe how the systems of the human body interact to maintain homeostasis.
8. explain why evolution is the most all-encompassing scientific explanation for the history of life and the similarities in biochemistry and physiological processes among living things.

Course student learning outcomes: http://www.mtsac.edu/instruction/outcomes/sloinfo.html

Materials:

1. Textbook: Krogh. 2011. Biology: A Guide to the Natural World. 5th edition. The 4th edition is similar, but has some slight differences, so it is only suitable if you are willing to check a 5th edition book periodically to see if you've missed anything. Available for rental at bookstore.
2. Lab Manual: Schmidt, Kakiba-Russell, Vail, Revell. 2011. Life All Around Us. 4th edition.
3. Pencil, eraser, colored pencils, ruler, calculator.

Some Advice for Success: Biology can be a challenging subject, requiring lots of time outside of class. My advice is that you seek help before you think you need it!

1. Introduce yourself to your classmates. Working with a group of inquisitive friends is a great way to identify material that you do not understand.
2. Study your notes the same day at home or the following day. We remember a very small percentage of what we hear, but if we review what we have heard, early and often, then we are more likely to remember it.
3. Read the textbook and rewrite your notes.
4. Ask Questions: If you do not understand the material, please ask me, or write your question down and ask me later. Since I love teaching, I am happy to help you understand the material. Asking questions if you don't understand is one of the most powerful things you can do to learn.

Assignments:

Review Questions: Before exams I will ask you to submit answers to several questions, related to recent material.
Scientific Article Critique: This will be discussed separately.
Field Observations: These will be discussed separately.

Assessments:

Lecture and Lab Quizzes: These are meant to motivate you to review recent material and prepare to discuss new ideas. Lecture quizzes may ask about the previous lecture or material you've read to prepare for that day's lecture. Lab quizzes will cover conclusions from previous week's lab and background for the upcoming lab. All quizzes begin at the start of the class session, and are due ten minutes later.

Lecture and Lab Exams: These assess your grasp of large sets of material. Review early and often. Lecture and lab exams are a combination of objective questions (matching, multiple-choice), short-answer questions, and diagrams to complete.

Lab Participation: To foster an atmosphere of persistence, I ask you to arrive on time, stay for the entire lab period, and make an honest effort to complete all lab activities. Part of your responsibility is to help your table-mates, and then to help the rest of the class complete the lab. Participation points are an encouragement, and are otherwise forfeited.

Lab: The laboratory portion is intended to teach you how science is done. You will learn to carry out a variety of kinds of observations and measurements. You will learn to use some kinds of lab tools and instruments. The focus will be on empirical science as a way of learning about the real world, including observations, testable questions, hypotheses, experimental design, and hypothesis testing. There will be a series of class exercises and written assignments intended to develop some of these skills.

Grading: Lab work is worth roughly one-third of the points in the course.

Lecture:	Quizzes (best 7 of 9)	7 x 10 pts	70
	Exams	2 x 50 pts	100
	Final Exam		125
Lab:	Quizzes (best 10 of 12)	10 x 10 pts	100
	Participation	15 x 5 pts	75
	Midterm		35
	Final		35
Assignments:	Field Observation		15
	Article Critique, Phase 1		30
	Article Critique, Phase 2		20
	Response Paper, Phase 1		30
	Response Paper, Phase 2		20
	Review Questions	3 x 5 pts	15
	Total		670

Grading Scale:

A	≥ 90%	≥ 603 pts
B	≥ 80 %	≥ 536
C	≥ 70 %	≥ 469
D	≥ 60 %	≥ 402
F	< 60 %	< 402

Policies:

1. Attendance: The most successful students come to class. Please save yourself from distraction and keep everyone safe by leaving children and friends elsewhere. If you are absent you are still responsible for anything discussed or assigned during class, including altered deadlines or test dates. If you miss class, be sure to get notes, handouts, and assignments from another student, since material covered in lecture may not always be in the text. Laboratories cannot be made up. I will drop those who miss the first 30 minutes of the first class meeting.

2. Enrollment Policy: Be sure to attend consistently in the first two weeks. If you miss a class in the first two weeks, please tell me if you intend to stay in the class, since I will drop absent students to make room for those on the waitlist. Otherwise, if you intend to leave the course, please do it officially. The deadline to add is Sept 5, to drop without a grade of "W" is Sept 8, and to drop with a "W" is Oct 31.

3. Considerate Behavior: Please help maintain our positive learning environment by arriving on time, limiting unrelated conversations, and minimizing your use of electronic devices. Cell phones may not be used during exams or other forms of assessment such as quizzes or in class assignments. If you touch your cell phone during any in-class graded assignment, I must assume that you are cheating, take the exam from you, and give you a grade of zero. (And you're right, I would rather not!)

4. Assignments and Late Assignments: Assignments (papers, journals) are due by the beginning of lecture on the due date. Lab assignments are due by the beginning of your next lab session. I try to strictly enforce this because we often work from your completed assignment in class. Assignments turned in after they are due are penalized by 10% and then an additional 40% after 48 hours (half-credit). Assignments will not be accepted once the graded assignments have been returned to your classmates.

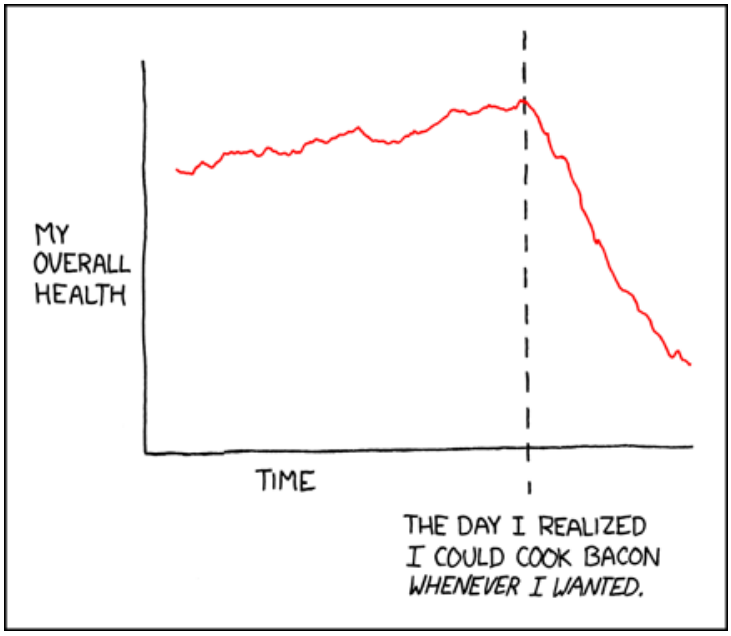
For labs that fall on holidays: You will not be held responsible for this material. You may still choose to get the hands-on experience by attending a different lab section.

5. Make-up exams: If you are ill, or have some kind of emergency, and will miss an exam as a result, call me as soon as you are able and leave a message (before class meets, if possible). I am at 909-274-5808. I will then use your final exam score to replace the missed exam score. You will be able to make up one exam, but not the final. Quizzes in lecture and lab cannot be made up. Your lowest two lecture and lowest two lab quiz scores are dropped.

Please note: Many students find the final exam especially challenging because of the amount of material it covers. As a result, some score the lowest on their final. I would like to see you do well in this class, so I recommend taking exams as they occur, getting your feedback, and improving as you go.

6. Cheating, Plagiarism, and Academic Integrity: Cheating and plagiarizing are dishonest, unfair, and devalue your degree. As a result, the college and the biology department have regulations that carry serious penalties, including failing this course. These regulations are detailed in the College Catalog and in our lab manual, and part of my job is to enforce them.

Disabled Student Programs & Services (DSP&S): 909-274-4290. Offers eligible students a variety of disability-related services, such as priority registration, counseling, notetakers, sign language interpreters, enlargement of materials, and other reasonable accommodations based on the student's educational limitations and needs. If this applies, please tell me if there is anything I can do to better accommodate you.



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Rajasaurus narmadensis. Todd Marshall, 2003. news.uchicago.edu. Accessed 17 Jan 2011.

Mt. San Antonio College
Biological Sciences Department Policy on Student Cheating

POLICY

1. No dictionaries, reference materials, notes, or programmable calculators may be used during any exam or quiz unless authorized by the professor.
2. No electronic devices, of any type, may be used during any exam or quiz unless authorized by the professor.
    a. Electronic devices include, but are not limited to: cell phones, PDAs (personal digital assistants), earphones, cameras, MP3 players, translation devices, and electronic dictionaries.
3. No talking, signaling, sharing of note cards, calculators or other materials is allowed during any exam or quiz, unless authorized by the professor.
4. Only the materials required or authorized for an exam or quiz should be taken out of your notebook, backpack, pocket, or purse. All other materials should be put away as instructed, including electronic devices.
5. Students may not leave the classroom during an exam or quiz unless authorized by the professor. If a student leaves the room without permission, the test or quiz will be forfeited at that time.
6. This policy will be strictly enforced by all professors in all classes taught in the Department.

CONSEQUENCES:

7. A single act of cheating or academic dishonesty in any form may result in receiving a 0 on that test, quiz or assignment.
8. Action taken by the professor will be consistent with the college policy on cheating and academic dishonesty. In addition, a report regarding the violation will be submitted to the Director of Student Life for further action, which may also result in further disciplinary action, including, but not limited to suspension or expulsion from the college.

WHAT IS CHEATING?

- Some examples of cheating include, but are not limited to:

a. Plagiarism, which is the use of materials authored by another person or obtained from a commercial source or the use of passages without proper acknowledgment.
b. Having or using unauthorized materials during any exam or quiz
c. Notes concealed in or written on clothing, hats, or skin (as examples).
d. Looking at another student's work during any exam or quiz.
e. Changing answers on a returned exam in order to claim there had been a grading error.
f. Sharing any content of exams or quizzes with individuals who have not yet taken it.
g. Removing an exam or quiz from the classroom without the professor's approval.
h. Taking photos of exams, quizzes, completed ScanTrons®, or exam keys.
i. Turning in work that was generated by other individuals or by the same individual but in a prior semester, including but not limited to: lab report data, lab report or homework questions, homework assignments, and extra credit assignments.
j. Working together on a lab experiment when told to work individually.
k. Falsifying lab data.
l. Allowing another student to look at your exam or quiz, or allowing another student to copy your homework, lab reports, or other assignments. (If that work is duplicated you may also receive the same penalties listed above for violation of the Biology Department Policy on Cheating, and the college policy on cheating and academic dishonesty.)
m. Falsifying documents, including signatures.

If you are unclear about what constitutes cheating in your class or for a particular assignment, please contact your instructor for clarification before the assignment is due.

- Keep this policy for your records.

Last updated February 22, 2013