**Mt. San Antonio College Lecture:** Tues – Thur 1:15-2:40 pm, Bldg.61, Rm.2320

**General Biology: BIOL 1 Spring 2020 Lab:** Tues - Thur 3:00-6:10 pm, Bldg.7, Rm.1111

**Instructor**: Tyler Flisik **Required Text**

**Contact info** Lecture: *What is Life?* 3rd Ed, Jay Phelan

Email: tflisik@mtsac.edu Lab: Life All Around Us, 5th Ed, Schmidt, Vail, Kakiba-Russell, and Revell 2010

**Office and office hours** **Required Supplies**

****Mon-Wed 3:00 – 4:00 pm Scantrons: (5)-Form #882, (10)-Form #815-E

Tue-Thur 10:30 – 11:30 am **Website**

Building 60, Rm 2407 www.Tylerdiscoverslife.com

Office phone # 909 274-4554

**Course Description:** A non-majors coursethat explores a wide range of biological concepts, including biological chemistry, cell structure and physiology, plant and animal structure and function, biodiversity, genetics, evolution, ecology and human impacts to the environment.

**Keys for Success**: The study of biology, even at a general level, can be very complex. Your success in this class is dependent on the effort that you put into this class. I teach this class at a college level and I expect that you will study and prepare at a college level. I will not lower my standards just to make the class easy for you. I believe if you show up for every class, spend time studying at home, and come to my office hours if you need help, that you will pass this class without much of a problem.

Don’t hesitate to ask for help, that’s why I’m here!

**Points Possible**

There is a total of 860 pts possible with lecture worth 2/3 and lab 1/3 of total points

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Lecture** | | | **Lab** | | | **Grading Scale** | |
| Homework Assign. | 5 x 5 pts | 25 | Quizzes | 13 x 10 pts | 130 | ≥90% | ≥774 pts = **A** |
| Biology Articles | 5 x 5 pts | 25 | Lab Activities | 15 x 5 pts | 75 | ≥80% | ≥688 pts = **B** |
| Quizzes (Best 6 of 10) | 6 x 5 pts | 30 | Midterm |  | 20 | ≥70% | ≥602 pts = **C** |
| Exams | 4 x 100 pts | 400 | Final |  | 25 | ≥60% | ≥516 pts = **D** |
| Final Exam |  | 100 | Participation |  | 30 | <60% | <515 pts = **F** |
| Total points |  | 580 pts |  |  | 280 pts |  |  |

* The lowest exam score can be replaced by the percent score of the lecture final if it is higher
* More than six lecture quizzes will be given, however, only the six highest score will be counted. Missed quizzes will be dropped
* 20% of the total points will be deducted from late assignments. Late assignments can be turned in no later than one week after they are due.

“Seen in the light of evolution, biology is, perhaps, intellectually the most satisfying and inspiring science. Without that light it becomes a pile of sundry facts―some of them interesting or curious but making no meaningful picture as a whole”

– Theodosius Dobzhansky (1973)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | Bio 1 Tentative Schedule | |  |
| **Week** | **Date** | **Topic** | **Chapter(s)** | **Lab** |
| 1 | 25-Feb | Intro to Biology and Scientific Method | 1 | 1: Mt. SAC CSI |
| 27-Feb | Basic Chemistry | 2 |
| 2 | 3-Mar | Molecules of Life; Quiz #1 | 2 | 2: You Are What You Eat! |
| 5-Mar | Digestion and Excretion | 22 |
| 3 | 10-Mar | The Cell; Quiz #2 | 3 | 3: The Cell & Metric System |
| 12-Mar | The Plasma Membrane | 3 |
| 4 | 17-Mar | Cellular Respiration; Quiz #3 | 4 | 4: How Things Move |
| 19-Mar | Homeostasis | 4 |
| 5 | 24-Mar | **Exam 1** | **1-4, 22** | 5: Cell. Resp. Metab. Rates |
| 26-Mar | Photosynthesis | 4 |
| 6 | 31-Mar | **Cesar Chavez Day – Campus Closed** | | 6: Plants and Photosynthesis |
| 2-Apr | Plant Basics; Quiz #4 | 17 |
| 7 | 7-Apr | Mitosis and Cancer | 5, 6 | 7: Biodiv. & Taxonomy |
| 9-Apr | Meiosis and Reproduction; Quiz #5 | 6, 25 |
| 8 | 14-Apr | DNA Structure and Replication | 5 | **Lab Midterm** (#1-7); |
| 16-Apr | DNA Gene Expression; Quiz #6 | 5 | 8: DNA, Protein Synthesis |
| 9 | 21-Apr | Genetics | **7** | 9: Genetics |
| 23-Apr | **Exam 2** | **4-6, 17** |
| 10 | 28-Apr | Genetics | 7 | 10: Microevolution |
| 30-Apr | Introduction to Evolution; Quiz #7 | 8 |
| 11 | 5-May | Microevolution | 8 | 11: Macroevolution |
| 7-May | Macroevolution; Quiz #8 | 10 |
| 12 | 12-May | Diversity of Life | 11 | 12: Climate Change |
| 14-May | Circulatory and Respiratory Systems | 21 |
| 13 | 19-May | **Exam 3** | 16 | 13: Human Resp. & Circ. |
| 21-May | Nervous System and Senses | 23 |
| 14 | 26-May | Population and Community Ecology | 14,15 | 14: Human Senses |
| 28-May | Ecosystems and Human Impacts; Quiz #9 | 16 |
| 15 | 2-Jun | Ecosystems and Human Impacts |  | 15: Ecology |
| 4-Jun | **Exam #4** | **14-16, 21, 23,26** |
| 16 |  | **Lecture Final, Jun 9, 1:30-4:00pm** | **Comprehensive** | **Lab Final** (#8-15),  **4:30-7:00pm** |
|

"Education is when you read the fine print. Experience is what you get if you don't."

- Pete Seeger

**The Fine Print**

**Lecture exams and quizzes -** You will have four lecture exams and a comprehensive final exam. I will replace your lowest exam score with the percentage of your final if it’s higher. There are no make–up practisums or quizzes. If you miss an exam or lecture quiz, then that will be the exam or quiz I drop.

**Lab activities, assignments and quizzes –** Laboratory activities provide students with the opportunity to explore concepts discussed in lecture in a hands-on manner using scientific methods and equipment. The laboratory activities are designed to coincide with concepts introduced in lecture, while proving an opportunity to reinforce those concepts in a different learning environment. Each week you will complete the lab assignment from the Biology 1 lab manual DURING lab. The lab assignment will be turned in the following week at the start of the lab period at the front desk. Quizzes will be given at the start of each lab on information from the previous lab (the one you just turned in) and the lab that you will be doing that day (you need to read the lab before coming to class!). You need to be on time to lab because if you are late you will miss the quiz! There are no makeup labs, quizzes or exams. After the quiz, I will give a 30 to 45-minute introductory lecture on the concepts addressed by the laboratory activities and will also demonstrate how to use the laboratory equipment that you will be using that day. For labs that require the use of microscopes, I will be checking your microscopes to make sure you are viewing what you are expected you to see. For labs that require you do a dissection, I will perform a demo dissection then move from group to group to guide you through your dissections. The last half hour of lab we will go over your results and we will discuss the review questions as a class. You will be expected to be in the lab the entire lab period except for taking short breaks to use the restroom or make a phone call. I also expect you to get all your laboratory work done during the lab period, which you should have plenty of time to do so. Please use your lab time wisely and don’t hesitate to ask for help understanding the material or the activity. That’s what I’m there for!

**Academic Integrity** - Any act of cheating will not be tolerated, and will result in a zero on that quiz, exam or assignment. You are fully capable of completing all assignments on your own and are expected to do so. If you have questions, ask your instructor!! I want to help you achieve a complete understanding of the material and will help you accomplish that. All students are to abide by the expectations outlined in the department cheating policy form and will be held accountable for any violations of those policies.

**Cell phones –** I know it’s tempting to look at your phone every 3 seconds and check your Facebook or whatever butplease save that for you breaks. If you need to make a phone call please step out of class. The labs are designed to keep you busy the entire lab period and any cell phone use within the lab will be seen as a lack of participation. If you use our cell phone during an exam or quiz, I will assume you’re cheating and will confiscate your test and give you a 0 on the assignment. I will not tolerate cell phone use within the lab and will take points off your participation score if you are seen using your phone during lab. If you **need** to use you phone then please step outside of the lecture or laboratory.

**Food or Drink –** Absolutely **NO** food or drink in the laboratory. **This will be strictly enforced.** You can leave your food or drink outside of the lab door and enjoy your refreshments on your break.

**Accessibility Resource Centers for Students (ACCESS):** 909-274-4290. Offers eligible students a variety of disability related services, such as priority registration, counseling, note takers, sign language interpreters, enlargement of materials, and other reasonable accommodations based on the student’s educational limitations and needs. Please notify your instructor immediately if you require special health or disability accommodations.

**Student Learning Outcomes**–

* Classify the molecules of living systems and apply basic principles of chemistry to their interaction.
* Relate cell structure and physiology.
* Compare and contrast the processes of photosynthesis and cellular respiration in terms of energy transformation in cells.
* Evaluate how life forms duplicate, maintain control, and exhibit hereditary patterns.
* Summarize the various types of evidence used to examine evolutionary principles.
* Assess how population and community dynamics are affected by ecological interactions.
* Describe how the systems of the human body interact to maintain homeostasis.
* 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

For clarity on the SLO’s for this course please visit [www.mtsac.edu/instruction/outcomes/sloinfo.html](http://www.mtsac.edu/instruction/outcomes/sloinfo.html)

“We learn . . . 10% of what we read, 20% of what we hear, 30% of what we see, 50% of what we see and hear, 70% of what we discuss, 80% of what we experience, 95% of what we teach others.”

~ William Glass

**Mount 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 as much as receiving an “F” in the course.

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