Syllabus BIOL 1370.201 Survey of Life Science Spring 2013

Instructor: Ms. Selinda Martinez E-mail: samartinez@tamiu.edu Office Location: LBVC 184

Office Hours:

Tuesday: 4:00 p.m- 6:00 p.m Wednesday: 9:30 a.m.- 12:30 p.m.

Friday: 9:30-11:30

Class Time: MWF 8:30 a.m. - 9:20 a.m.

Location: Bullock Hall 118

I. Course Description: Three semester hours.

BIOL 1370 is basic introductory course stressing fundamental biological principles and concepts. It is designed to acquaint the future elementary teacher with the various structures, functions, life histories, and occurrence of local plants and animals. May be taken concurrently with BIOL 1170. Required for elementary education certification. Not for students majoring or minoring in science. Fulfills the laboratory science core curriculum requirement.

- II. Student Learning Objectives: Upon the successful completion of this course students will be able to:
 - 1. apply critical thinking and the scientific method to examine biological phenomena.
 - 2. design an experiment to test a specific biological hypothesis.
 - 3. communicate scientific information both verbally and through written reports.
 - 4. effectively discuss the relationships between organisms and their environment.
 - 5. collaborate effectively on a research project and on a presentation of scientific results.
 - 6. describe the basic structure and function of plants and animals at various levels of biological complexity.
 - 7. describe the process of adaptation and the theory of evolution.

Core-Curriculum Learning Outcomes:

- 1. Critical Thinking: includes creative thinking, innovation, inquiry and analysis, evaluation, and synthesis of information. (SLOs: 1 & 2)
- 2. Communication Skills: Students will demonstrate their ability to communicate effectively by using written communication. (SLOs: 3 & 4)
- 3. Empirical and Quantitative Skills: includes the manipulation and analysis of numerical data or observable facts resulting in informed conclusions. (SLOs: 2)
- 4. Teamwork: includes the ability to work effectively with others to support a shared goal. (SLOs: 5)

III. Textbook:

Starr, Cecie, Evers, Christine, and Starr, Lisa. 2011. Biology: Concepts and Applications (8th Edition). Cengage Learning.

IV. Important Dates
January 22: First Class Day
February 6: 12th class Day
March 11- 16: Spring Break
March 13: Midterm grades Due

March 29-30: Easter

April 19: Last day to drop a course May 7: Last class Day

IV. Course Policies:

1. Written Report: Students will be required to write 2 written reports based on a scientific article. The length of the article must be 2-3 pages long using 12pt courier new, times new roman, or Calibri type font. The written report must be completed and turned in at the beginning of the class period along with the science article. Points will be deducted for late submission. The written report must include a summary of the article, what was learned from reading this article, what are some questions that are left unanswered, what else would you like to know about this topic, and how does this relate to future research.

<u>2. Exams</u>: There will be 3 unit exams throughout the semester. The exams will cover material discussed in the lecture, textbook, and reading assignments. They may include multiple choice, short answer, matching, fill in the blanks, true and false, and labeling. If you are absent you must take the test on the following school day.

<u>3. Quizzes:</u> Quizzes will be announced and given periodically throughout the semester. Quizzes cannot be made up unless it is an excused absence.

- <u>4.</u> <u>Reading Assignments</u>: A reading assignment will be assigned for each chapter and will be posted on e-learning. Points will be deducted for late submission.
- <u>5. Final Exam</u>: The final exam will be cumulative and will cover all material discussed in class from Exams 1-3 and quizzes.
- <u>6. Attendance:</u> Students may be excused from class only for illness (self), death in the immediate family, or official university business. Documentation must be present in order for the absence to be excused. <u>Students are responsible for any material missed due to an absence in the class and letting the instructor know when he(she) will be absent.</u>
- <u>7. Special Assistance:</u> If a student has any special needs and/or assistance, it is the responsibility of the student to bring it to the attention of the instructor.
- <u>8. Electronics:</u> Cell phones must be turned off and put away at the beginning of the class. MP3 players and other electronic devices are also prohibited within the classroom.
- 9. <u>Plagiarism:</u> According to the student hand book, "Should a faculty member discover that a student has committed plagiarism, the student will receive a grade of "F" in that course, and the matter will then be referred to the Executive Director of Student Life for possible disciplinary action". More info on this can be found on the TAMIU website.

If there are any questions concerning this course, grades, or policies please do not hesitate to ask me. If you are unable to meet with me during class please feel free to contact me through either email or phone. You may also set up an appointment to meet with me or can come by my office during office hours.

Grading Criteria
Reading Assignments
Written Reports 20% 15% 10% Quizzes Unit Exams 25% Final Exam 30% Total 100%

A 90-100 Excellent; **B** 80-89 Good; **C** 70-79 Average; **D** 60-69 Passing*; **F** < 60 Failing

V. Tentative Class Schedule:

Class Date	Topics Covered	Readings
Week 1: Jan. 23, 25	Introduction	Pgs3-19
	Chapter 1: Invitation to Biology	
Week 2: Jan. 28-Feb. 1	Chapter 1: Invitation to Biology	Pgs 3-19
	Chapter 2: Life's Chemical Basis	Pgs23-33
Week 3: Feb. 4-8	Chapter 3: Molecules of Life	Pgs 37-47
	Chapter 4: Cell Structure	Pgs 51-71
Week 4: Feb. 11-15	Chapter 5: Ground Rules of Metabolism	Pgs 75-89
	Chapter 6: Photosynthesis	Pgs 93-103
Week 5: Feb. 18-22	Chapter 7: How Cells Release Chemical Energy	Pgs 107-119
	February 22: Exam I	
Week 6: Feb. 25- March 1	Chapter 8: DNA Structure and Function	Pgs 123-133
	Chapter 9: From DNA to Proteins	Pgs 137-148
		Written
		Report Due
		(03/01)
Week 7: March 4-8	Chapter 11: How Cell's Reproduce	Pgs 163-177
	Chapter 12: Meiosis and Sexual Reproduction	Pgs 175-185
Week 8: March 11-15	Spring Break- No Classes	N/A
Spring Break No Classes	Spring Break No Glasses	14// (
Week 9: March 18-22	Chapter 13: Observing Patterns in Inherited Traits	Pgs 189-199
Week / Maren 16 22	Chapter 14: Human Inheritance	Pgs 203-215
Week 10: March 25-29	Chapter 14: Human Inheritance	Pgs 203-215
March 29 th : Easter Break: No	March 27th: Exam II	. go _00 0
Classes		
Week 11: April 1-April 5	Chapter 17: Process of Evolution	Pgs 257-279
Week 12: April 8-12	Chapter 39: Animal Behavior	Pgs 657-669
Week 13: April 15-19	Chapter 40: Population Ecology	Pgs 673-687
Week 14: April 22-26	Chapter 41: Community Ecology	Pgs 691-705
·	. 5	Written

		Report Due (04/26)
Week 15: April 29- May 3	Chapter 42: Ecosystems May 3: Exam III	Pgs 709-719
Week 16: May 6	Chapter 42: Ecosystems	Pgs 709-719
Friday May 10	Final Exam: 8:00 a.m.	

The syllabus is subject to change!

Policies of the College of Arts and Sciences

(Required on all COAS Syllabi)

Classroom Behavior

The College of Arts and Sciences encourages classroom discussion and academic debate as an essential intellectual activity. It is essential that students learn to express and defend their beliefs, but it is also essential that they learn to listen and respond respectfully to others whose beliefs they may not share. The College will always tolerate diverse, unorthodox, and unpopular points of view, but it will not tolerate condescending or insulting remarks. When students verbally abuse or ridicule and intimidate others whose views they do not agree with, they subvert the free exchange of ideas that should characterize a university classroom. If their actions are deemed by the professor to be disruptive, they will be subject to appropriate disciplinary action, which may include being involuntarily withdrawn from the class.

Plagiarism and Cheating

Plagiarism is the presentation of someone else's work as your own. 1) When you borrow someone else's facts, ideas, or opinions and put them entirely in your own words, you must acknowledge that these thoughts are not your own by immediately citing the source in your paper. Failure to do this is plagiarism. 2) When you also borrow someone else's words (short phrases, clauses, or sentences), you must enclose the copied words in quotation marks as well as citing the source. Failure to do this is plagiarism. 3) When you present someone else's paper or exam (stolen, borrowed, or bought) as your own, you have committed a clearly intentional form of intellectual theft and have put your academic future in jeopardy. This is the worst form of plagiarism.

Here is another explanation from the 2010, sixth edition of the *Manual of The American Psychological Association* (APA):

Plagiarism: Researchers do not claim the words and ideas of another as their own; they give credit where credit is due. Quotations marks should be used to indicate the exact words of another. Each time you paraphrase another author (i.e., summarize a passage or rearrange the order of a sentence and change some of the words), you need to credit the source in the text. The key element of this principle is that authors do not present the work of another as if it were their own words. This can extend to ideas as well as written words. If authors model a study after one done by someone else, the originating author should be given credit. If the rationale for a study was suggested in the Discussion section of someone else's article, the person should be given credit. Given the free exchange of ideas, which is very important for the health of intellectual discourse, authors may not know where an idea for a study originated. If authors do know, however, they should acknowledge the source; this includes personal communications. (pp. 15-16)

Consult the Writing Center or a recommended guide to documentation and research such as the *Manual of the APA* or the *MLA Handbook for Writers of Research Papers* for guidance on proper documentation. If you still have doubts concerning proper documentation, seek advice from your instructor prior to submitting a final draft.

Penalties for Plagiarism: Should a faculty member discover that a student has committed plagiarism; the student should receive a grade of 'F' in that course and the matter will be referred to the Honor Council for possible disciplinary action. The faculty member, however, may elect to give freshmen and sophomore students a "zero" for the assignment and to allow them to revise the assignment up to a grade of "F" (50%) if they believe that the student plagiarized out of ignorance or carelessness and not out of an attempt to deceive in order to earn an unmerited grade. This option should not be available to juniors, seniors, or graduate students, who cannot reasonably claim ignorance of documentation rules as an excuse.

Caution: Be very careful what you upload to turn in or send to your professor for evaluation. Whatever you upload for evaluation will be considered your final, approved draft. If it is plagiarized, you will be held responsible. The excuse that "it was only a draft" will not be accepted.

Caution: Also, do not share your electronic files with others. If you do, you are responsible for the possible consequences. If another student takes your file of a paper and changes the name to his or her name and submits it and you also submit the paper, we will hold both of you responsible for plagiarism. It is impossible for us to know with certainty who wrote the paper and who stole it. And, of course, we cannot know if there was collusion between you and the other student in the matter.

Penalties for Cheating: Should a faculty member discover a student cheating on an exam or quiz or other class project, the student should receive a "zero" for the assignment and not be allowed to make the assignment up. The incident should be reported to the chair of the department and to the Honor Council. If the cheating is extensive, however, or if the assignment constitutes a major grade for the course (e.g., a final exam), or if the student has cheated in the past, the

student should receive an "F" in the course, and the matter should be referred to the Honor Council. Under no circumstances should a student who deserves an "F" in the course be allowed to withdraw from the course with a "W." **Student Right of Appeal**: Faculty will notify students immediately via the student's TAMIU e-mail account that they have submitted plagiarized work. Students have the right to appeal a faculty member's charge of academic dishonesty by notifying the TAMIU Honor Council of their intent to appeal as long as the notification of appeal comes within 5 business days of the faculty member's e-mail message to the student. The **Student Handbook** provides details

UConnect, TAMIU E-Mail, and Dusty Alert

Personal Announcements sent to students through TAMIU's UConnect Portal and TAMIU E-mail are the official means of communicating course and university business with students and faculty — not the U.S. Mail and not other e-mail addresses. Students and faculty must check UConnect and their TAMIU e-mail accounts regularly, if not daily. Not having seen an important TAMIU email or UConnect message from a faculty member, chair, or dean is not accepted as an excuse for failure to take important action. Students, faculty, and staff are encouraged to sign-up for *Dusty Alert* (see www.tamiu.edu). *Dusty Alert* is an instant cell phone text messaging system allowing the university to communicate immediately with you if there is an on-campus emergency, something of immediate danger to you, or a campus closing.

Copyright Restrictions

The Copyright Act of 1976 grants to copyright owners the exclusive right to reproduce their works and distribute copies of their work. Works that receive copyright protection include published works such as a textbook. Copying a textbook without permission from the owner of the copyright may constitute copyright infringement. Civil and criminal penalties may be assessed for copyright infringement. Civil penalties include damages up to \$100,000; criminal penalties include a fine up to \$250,000 and imprisonment.

Students with Disabilities

Texas A&M International University seeks to provide reasonable accommodations for all qualified persons with disabilities. This University will adhere to all applicable federal, state, and local laws, regulations and guidelines with respect to providing reasonable accommodations as required to afford equal education opportunity. It is the student's responsibility to register with the Director of Student Counseling and to contact the faculty member in a timely fashion to arrange for suitable accommodations.

Incompletes

Students who are unable to complete a course should withdraw from the course before the final date for withdrawal and receive a "W."

To qualify for an "incomplete" and thus have the opportunity to complete the course at a later date, a student must meet the following criteria:

- 1. The student must have completed 90% of the course work assigned before the final date for withdrawing from a course with a "W", and the student must be passing the course;
- 2. The student cannot complete the course because an accident, an illness, or a traumatic personal or family event occurred after the final date for withdrawal from a course:
- 3. The student must sign an "Incomplete Grade Contract" and secure signatures of approval from the professor and the college dean.
- 4. The student must agree to complete the missing course work before the end of the next long semester; failure to meet this deadline will cause the "I" to automatically be converted to a "F"; extensions to this deadline may be granted by the dean of the college.

This is the general policy regarding the circumstances under which an "incomplete" may be granted, but under exceptional circumstances, a student may receive an incomplete who does not meet all of the criteria above if the faculty member, department chair, and dean recommend it.

Student Responsibility for Dropping a Course

It is the responsibility of the STUDENT to drop the course before the final date for withdrawal from a course. Faculty members, in fact, may not drop a student from a course without getting the approval of their department chair and dean.

Independent Study Course

Independent Study (IS) courses are offered only under exceptional circumstances. Required courses intended to build academic skills may not be taken as IS (e.g., clinical supervision and internships). No student will take more than one IS course per semester. Moreover, IS courses are limited to seniors and graduate students. Summer IS course must continue through both summer sessions.

Grade Changes & Appeals

Faculty are authorized to change final grades only when they have committed a computational error or an error in recording a grade, and they must receive the approval of their department chairs and the dean to change the grade. As part of that approval, they must attach a detailed explanation of the reason for the mistake. Only in rare cases would another reason be entertained as legitimate for a grade change. A student who is unhappy with his or her grade on an assignment must discuss the situation with the faculty member teaching the course. If students believe that they have been graded unfairly, they have the right to appeal the grade using a grade appeal process in the *Student Handbook* and the *Faculty Handbook*.

Final Examination

Final Examination must be comprehensive and must contain a written component. The written component should comprise at least 20% of the final exam grade. Exceptions to this policy must receive the approval of the department chair and the dean at the beginning of the semester.