**Biology 101-50 (#18333): Elements of Biology**  
Fall 2014 Syllabus

**Instructor Information**

**Instructor:** Maryanne Menvielle, M.S.  
**Office:** MH 045 (in the basement)  
**Office Hours:** Tuesday 2:30-3:30pm; By appointment  
**Office Telephone:** 657-278-5125 (Only during office hours)  
**E-mail:** mmenvielle@fullerton.edu

***Email is the preferred method of communication for this course. Emails will be checked twice daily Monday through Friday and at least once on the weekend. Responses to emails will usually occur within 10 hrs but may take as long as 24 hrs.***

| NOTE: Emails must be written with proper etiquette in mind. This means they should: 1) contain a greeting to the person you are sending it to; 2) contain a subject line relevant to the contents; 3) be composed properly (no “text talk”); 4) be signed with your full name AND course information (in this case your emails should state Biol 101-51) |

**Course Description (from catalog):**

Underlying principles governing life forms, processes and interactions. Elements of biology and reasoning skills for understanding scientific issues on personal, societal and global levels. For the non-science major. No credit toward biological science major.

**Textbook & Course Materials**

- Access to PrepU quizzing system

**Helpful Resources**

- For writing assignments utilize the resources available: CSUF Writing Center ([http://hss.fullerton.edu/english/wc](http://hss.fullerton.edu/english/wc)) or the University Learning Center ([http://www.fullerton.edu/ulc](http://www.fullerton.edu/ulc))  
- Tutoring is available through the University Learning Center ([http://www.fullerton.edu/ulc](http://www.fullerton.edu/ulc)) located on the second floor of Pollak Library North. Call (657) 278-2738 for an appointment.  
- Office of Disability Support Services is located in University Hall 101. Call (657) 278-3117 for an appointment.  
- As a student, health and psychological services are available at the Student Health and Counseling Center. For student health services call (657) 278-2800. To make an appointment with Counseling and Psychological Services (CAPS) call (657) 278-3040.  
- Academic advising can be provided by Academic Advisement Center located in University Hall 123B. For more information call (657) 278-3606.
Course Structure

This course will be delivered entirely online through the course management system Titanium. You will use your Titanium account to login to the course through the portal at fullerton.edu. In Titanium, you will access online lessons, course materials, and resources. Activities will consist of discussion forums, online assignments, Turnitin submissions, quizzes and exams.

Titanium Access

Firefox is the preferred Web browser to access this course on Titanium. If you do not already have Firefox, you can download it from https://www.mozilla.org/en-US/

You may also need to download Quick Time and Flash to view some of the course resources.

You may also need to disable the pop-up blockers on your computer to allow downloads from the Titanium course site.

Technology Requirements

- Reliable and accessible internet connection. (You should identify an alternative computer to use in case your reliable computer isn’t so reliable).

- All entering students are expected to be knowledgeable in the use of a personal computer (PC or Macintosh) prior to being admitted to the university. Entering students should have 1) the ability to use a PC to locate, create, move, copy, delete, name, rename, and save files and folders on hard drives and on secondary storage devices such as floppy disks; 2) the ability to use a word processing program that runs on a PC or Macintosh computer to create, edit, format, store, retrieve, and print documents; 3) the ability to use an electronic mail system to receive, create, edit, print, save, and send an e-mail message with and without an attached file; and 4) the ability to use an Internet browser to search the World Wide Web. Students who feel they do not meet the expected level of competency, should contact the Academic Advisement Center at 657-278-3606.

- Hardware, Software, and Infrastructure Requirements
  - Software Requirements: You will need a word processing program. If you have an older or rare software program, it must be able to save files in .RTF or .DOC. As a CSUF student, you may purchase MS Office at a reduced rate from the Titan Shops.
  - E-mail account: You must have an E-mail account that you can access daily. It is recommended that you use the CSUF email and access class through the portal http://my.fullerton.edu.
  - FOR PC USERS: Minimum Hardware: 1 Ghz or higher multimedia processor; 1GB RAM; DSL or cable modem is recommended.
  - Minimum System Software: XP or higher Operating System, Internet Access (an Internet Service Provider) and an internet browser (You must use Firefox for Titanium features to work properly),
  - FOR MAC USERS: Mac requirements: 1 Ghz or higher multimedia processor, OS X or higher. Firefox.
Course Objectives

Student Learning Outcomes: The goals for Biology 101 are for student learning of the following major scientific ideas:

a. Living things are made of smaller structures whose functions enable the organism to survive.
   Biology 101 Students should be able to:
   - Define the characteristics of life
   - Differentiate between the main classes of biologically important molecules.
   - Summarize cell theory
   - Explain the processes associated with cell growth & division
   - Compare & contrast characteristics of prokaryotic & eukaryotic cells
   - Relate cell structure to cell function
   - Explain how an organism maintains homeostasis
   - Organize functions within levels and explain relationships between levels of biological organization (cell, tissue, organ, organ system, organism)

b. Living things depend on each other and the physical environment as they interact to obtain, change, and exchange matter and energy.
   Biology 101 Students should be able to:
   - Describe how energy from the sun drives most activities on the earth's surface
   - Sketch the flow of energy & matter through higher levels of biological organization
   - Explain the ways in which organisms may interact
   - Identify factors that affect population growth and decline
   - Identify factors that affect ecological organization at the community & ecosystem level
   - Assess the role of humans in natural systems
   - Describe & give examples of the value of biodiversity & the natural world

c. The great diversity of living things is the result of billions of years of evolution of organisms through the mechanisms of heredity, random change, and natural selection.
   Biology 101 Students should be able to:
   - Illustrate the Central Dogma
   - Explain & apply the basic principles of inheritance
   - Summarize the evidence for evolution
   - Describe how different processes (e.g. mutation, gene drift, selection) can lead to genetic differentiation and speciation
   - Define and explain natural selection
   - Interpret evolutionary relationships among organisms
   - Explain how evolutionary principles & ideas influence daily lives (e.g. GMOs, AIDS, antibiotic resistance)

Biology 101 students will also possess the following skills:
   Biology 101 Students should be able to:
   - Retrieve information from a variety of sources (e.g. popular press, scientific papers)
   - Apply the scientific method
   - Critically evaluate data accurately (graphs, tables, text)
   - Critically evaluate claims rather than accept authoritative statements
In order to meet the General Education objectives for the Natural Sciences and Life Sciences, this course will introduce you to the basic principles of biology, and will give you the tools to think like a biologist. I believe that you need to understand how the natural world works if you are going to have a good life, get a good job, and be a good citizen. The critical and creative thinking skills that you develop as you “do” science will help you in many areas of your life. For example, if members of your family have suffered from diabetes, how would you use genetic information about susceptibility to diabetes in thinking about your diet, and in planning whether to have children? If you choose not to have children, or to wait, what form of birth control should you use? If you choose to have children, should you feed them genetically engineered food? What about organic food? Should you take your family on holidays to areas that are vulnerable to extinction due to human contact? Should you take them to areas in which there are serious viral outbreaks?

**Topic Outline**

This course is divided into 3 main units, each consisting of 2 – 3 topic-based modules. The modules are used as a foundation for both studying the biological concepts and in developing critical thinking skills. All modules within the unit open on the same date, although each module has its own due date. An exam will be given at the end of each unit. Refer to the course calendar for specific due dates and times. Activities and assignments will be explained in detail within each week's corresponding learning module.

**Unit 1:**
- Scientific Thinking
- Amazing Stem Cells
- Healthy You

**Unit 2:**
- Genetically Modified Foods
- Genetic Testing
- Treatment Resistant STIs

**Unit 3:**
- Evolution of Biodiversity
- Our Effects on the World Around Us

**Important Note:** This syllabus, along with course assignments and due dates, are subject to change. It is the student's responsibility to check Titanium for corrections or updates to the syllabus. Any changes will be clearly noted in course announcement or through Titanium email.
Course Activities

All assignments 1) **are required to be completed independently unless otherwise stated** 2) must be submitted in the format requested (i.e. an email attachment will NOT be accepted when the assignment is to be submitted to Titanium) 3) must be completed according to the directions – if directions are not followed, a student may receive a zero on the assignment or exam. Deadlines for assignments are primarily **Thursday at 8pm or Sunday at 8pm (see schedule)**

- **Assignments (20% of overall grade):** Assignments will require you to utilize critical thinking skills and apply the current concept to a new situation. The format of these assignments will vary depending on the nature of the material – usually an uploaded document or SCORM assignment. Completed assignments can be sent to me for comments until 8pm on Tuesdays (48hrs prior to the deadline). Grades will usually be posted on Titanium within 2 weeks of the assignment deadline.

- **Discussions (10% of overall grade):** Students will be assigned to a discussion group and will be expected to participate in the discussion for each module. See the attach explanation for discussion board grading.

- **PrepU Quizzes (10% of overall grade):** PrepU is an adaptive quizzing system. You must continue taking quizzes until you reach mastery level 4. Completing a PrepU assignment will ALWAYS require taking more than 1 quiz.

- **Exams (50% of overall grade):** You will have 3 exams throughout the semester. Since you have various resources available to you while taking the exam, most questions will require you to compare and contrast various concepts, link a concept to the larger picture, critically evaluate a scenario using what you have learned or apply your knowledge to a new situation. Exams are posted in multiple parts (usually two multiple choice sections – fast facts and conceptual - and a short answer section with answers written in your own words) and all sections must be completed prior to the deadline. Grades are usually posted 7 – 10 days after the exam closes.

- **Research Assignment (10% of overall grade):** The written portion of the assignment meets the Core Competency requirement for writing in the General Education curriculum. It will require the organization and expression of complex data and ideas in a paper reviewing a biological issue that is current and controversial. Your grade for the paper will be based both on the content of what you write AND the quality of your writing. **LATE ASSIGNMENTS WILL NOT BE ACCEPTED.** If you do not turn in your paper by the due date and time, it will not be graded and you will receive a zero for the assignment. All writing assignments must be submitted electronically to Turnitin.com. Detailed instructions on the assignment will be available on Titanium. Grading of these assignments will take a **minimum of 3 weeks.**

- **Extra Credit:** While I don’t intend to offer any extra credit, **if** it is offered, the extra credit assignment will be available to all students on an equitable basis. Please do not ask for an individual assignment that is in addition to anything offered to the entire class.
Grades

Grades will be posted on Titanium for you to review. You are expected to regularly (i.e. weekly) check your scores for accuracy and bring any questions to the instructor in a timely manner (see Re-grade policy). Your grade in this course will be assessed as follows:

- Assignments (20%)
- Discussions (10%)
- PrepU (10%)
- Exams (50%)
- Research Assignment (10%)

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Course Policies

Participation and Responsibilities

Students are expected to:

- **Spend 5-7 hours each week on this course.** You may spend slightly more or less depending on your level of knowledge and work habits, but be prepared to spend a significant amount of time on this class.
- Check their fullerton.edu email daily for course updates.
- Read assigned material in the text, and view ALL lecture and support material and take quality notes using the reading and viewing guides.
- Listen actively to lectures – think about the material
- Ask questions to both the instructor, and your classmates (via message boards)
- Complete all assignments– PrepU quizzes, exams, discussions, assignments, and papers – *independently.*
- Keep track of deadlines
- Check your grades weekly
- Students are required to save digital receipts. If there is ever a question about whether an assignment was submitted, the digital receipt (from Turnitin.com) is the ONLY evidence of submission that will be accepted.
- Students are expected to know and follow rules of “netiquette”. See resource information at [http://www.albion.com/netiquette/corerules.html](http://www.albion.com/netiquette/corerules.html)
Late Work Policy

You should have all your work completed and submitted by 8pm on the due date. However, work will be accepted without penalty until 11:00pm. The purpose of this grace period is so you can correct any technical issues that arise. If you have a problem with your internet or computer, you are expected to solve the problem before the grace period expires, or find another computer on which to finish your work. Further extensions (past 11:00pm) are not granted for technical issues. It would be a good idea to identify an alternate computer for you to use in case your regular computer has an issue – the campus computer lab or a friend’s computer would be a reliable choice. Be aware that Titanium undergoes regular maintenance after 10pm on Thursday evenings.

In the event of serious technical problems, students may submit work directly by email to the instructor prior to the end of the grace period at mmenvielle@fullerton.edu. HOWEVER, students are expected to seriously attempt to resolve technical problems before emailing assignments. Contact the instructor as soon as you have an issue. In the event of a Titanium technical problem, please report your concern to the Help Desk at 657-278-2777.

As a last resort, assignments may be surface mailed to Maryanne Menvielle, Department of Biological Science, Cal State Fullerton, PO Box 6850, Fullerton, CA 92834-6850. Any mailed assignment must be postmarked by the due date.

You are expected to keep track of deadlines. Work can be made up or submitted late ONLY if the student has a documented, valid reason for the need to complete work late. An example of such a reason would be a serious illness documented with a doctor’s note. Make-up work is accepted at the discretion of the instructor and may incur a grade penalty. A student may also be required to appear in-person to complete a make-up. Technical problems with your personal computer or internet connection are not considered valid reasons for missing deadlines. If you have a technical issue beyond your control (for example, the PrepU site is down), you must inform the instructor PRIOR to the 8pm deadline, and then wait for a response with instructions on how to proceed.

Re-Grading Policy
As a human, I may make mistakes. If you feel that a mistake has been made in the grading of an assignment or exam, please contact me within 2 weeks (preferably during office hours) of the grade being posted on Titanium.

Withdrawal Policy
The CSUF policy regarding withdrawal from classes (UPS 300.016) will be followed. After the first two weeks of the semester, students may be granted withdrawal ONLY by presenting compelling evidence outlining a physical, medical, or emotional condition that prevents completion of the course. Poor academic performance is not evidence of a serious reason for withdrawal. Students unable to produce official documentation will be required to take the grade they have earned in the class. Please refer to the course schedule for information on the last day to withdraw with a W grade. Important dates concerning registration are on the inside cover of the CSUF Class Schedule or at: http://www.fullerton.edu/admissions/.

- The withdrawal deadline for this semester is: November 14, 2014.
Academic Honesty Policy & Procedures

Academic Integrity: It is assumed that by enrolling in this class your intentions are honorable, that you accept responsibility for earnest effort toward understanding the subject, and that you will not cheat on any assignment for this course. You must perform all of your own work. The CSUF policy statement is reproduced in part below.

- Academic dishonesty includes such things as cheating, inventing false information or citations, plagiarism, and helping someone else commit an act of academic dishonesty. It usually involves an attempt by a student to show a possession of a level of knowledge or skill, which he/she in fact does not possess.

- Cheating is defined as the act of obtaining or attempting to obtain credit for work by the use of any dishonest, deceptive, fraudulent, or unauthorized means. Examples of cheating include, but are not limited to, the following: using notes or aids or the help of other students on tests and examinations in ways other than those expressly permitted by the instructor, plagiarism as defined below, tampering with the grading procedures, and collaborating with others on any assignment except when collaboration with your classmates is explicitly allowed or encouraged. Violation of this prohibition of collaboration shall be deemed an offense for the person or persons collaboration on the work, in addition to the person submitting the work.

- Plagiarism is defined as the act of taking the work of another and offering it as one’s own without giving credit to that source. When sources are used in a paper, acknowledgment of the original author or source must be made through appropriate references and, if directly quoted, quotation marks or indentations must be used.” (CSUF Policy 300.021, effective 6 May 2005). Please make sure you understand what plagiarism is and how to avoid it. For more information on this topic please see http://www.fullerton.edu/deanofstudents/judicial/Plagiarism.htm.

- Authentication of student work: Authentication of student work is accomplished by requiring multiple types of assessments: formal papers, assignments, email contact with the instructor, short quizzes, and longer exams. Students may be asked to meet with the instructor for further authentication.

Students who violate university standards of academic integrity are subject to disciplinary sanctions. University policies are strictly enforced in this course. Please familiarize yourself with the academic integrity guidelines found in the current student handbook. All acts of academic dishonesty will be reported to the Dean. The minimum penalty for cheating or plagiarism in this course is 10% of the final course grade, even if the assignment in question was worth significantly less than that. The maximum penalty is failure of the course. Penalties are given based on the severity of the incident (as determined by the instructor) and the weight of the assignment or exam in question. Penalties are at the instructor’s discretion. Students who have been accused of cheating or plagiarism must take the course exams in person.
Student Accommodations

As your instructor, I feel I have a responsibility to do everything within reason to actively support a wide range of learning styles and abilities. As such, I have incorporated a variety of presentation types and assessments into the course. Feel free to discuss your progress in this course with me at any time. In addition, if you require any accommodations, submit your verified accommodations from the Office of Disability Support Services (DSS) within the first two weeks of class. DSS is located in UH-101 and can be reached at (657) 278 – 3117.

Faculty Obligation to Meet Classes

In the event of an emergency that disrupts normal campus operations or causes the University to close for a prolonged period of time due to circumstances such as an earthquake, we will do our best to continue the class via Titanium, if it is available. Therefore, as soon as possible after such an event and at least once a day, check the class Titanium site and your CSUF email for messages and instructions. You can obtain emergency information about campus operations on the CSUF website, via the Fullerton Campus Operation & Emergency Closure Line (657-278-4444) or the Irvine Campus Operation & Emergency Closure Line (657-278-8676).

Use of class email lists in TITANium

In the past, there were a couple of incidents of students using class email lists to contact members of the class about non-course related items, such as voting for a specific student in elections, announcing events on campus in which the student was involved, etc. Students should not use contact information from this course without prior permission. Any violations of this policy may result in disciplinary action.

CSUF is a smoke free campus

California State University, Fullerton prohibits smoking in all interior and exterior campus areas and locations effective August 1, 2013 as specified below:

- Buildings (including residence halls), structures (including parking structures), and outdoor areas owned, leased or rented by the university or one of its auxiliaries whether located on or off the Fullerton main campus.
- Vehicles owned, leased or rented by the university or one of the university’s auxiliaries.
- Vehicles on university-owned, leased, or rented land or in university-owned, leased, or rented parking structures.

The sale or distribution of any tobacco product, including smokeless tobacco products, also is prohibited.

The course material and assignments are my intellectual property. They may not be posted or shared on outside websites. If I track a posting back to you from an outside source, you will be referred to the Dean for an act of academic dishonesty, even if the semester has ended.
Rubric For Participation in Discussion Forums

Participating in the Discussion
Students have been randomly assigned to a discussion group, and will remain in that group for the entire semester. The discussions are expected to both expand your knowledge of the content material for the course, AND assist you in understanding the real-world social applications and concerns brought about by the scientific material we are learning. Students are encouraged to post additional threads if there are other areas of interest concerning the article or topic that are not covered by the instructor questions.

Posting
Your posts are required to be substantive, and advance or re-frame the discussion in some way. In other words, you must do more than say “I agree” or “I disagree,” and you must not merely restate what someone else says. Don’t be afraid to play “devil’s advocate” in the discussion to get your peers thinking about the other side of an issue. See the “Successful Participation in Online Discussion” page on Titanium for tips and examples.

Grading
The online discussions account for 10% of your final grade. You are expected to participate in some way in discussions for each module. I will be reading posts regularly throughout the semester (several times/week) but will only participate in the discussion if necessary. Grading will be done at the closing deadline of each discussion.

Your posts will be graded with the following in mind:
• Relevance to topic
• Evidence of thought/reflection, or seeking of information from other sources
• Evidence of critical thinking (i.e. these discussion topics ought to elicit some analysis on your part: ask questions, and more questions; posit some explanations, hypotheses, original ideas. What do you think?)
• Temporal Placement – To have a discussion, there must be an exchange of ideas. Therefore, it is not sufficient to post on a single day. Discussions are open for two weeks. Students are expected to post their initial thoughts during the first week and reply to their classmates during the second week. Posting on only 1 day will not earn full credit.
• Collegiality — adherence to the norms of courtesy appropriate in academic (but informal) discussion

Community Standards and “Netiquette”
Your but writing should be clear and understandable to get your point across. If you have multiple spelling or grammar errors that affect the clarity of your point you may be marked down. You are also required to adhere to the norms of online courtesy – known as “netiquette” http://www.albion.com/netiquette/corerules.html

Consistently inappropriate posts by any student will be treated similarly to consistent inappropriate classroom behavior, and may result in that student’s being barred from further online discussion in the class, with a resulting loss of the participation grade for the course. Please contact me if you have any questions about this.