



Biology 3A-3394-INTRODUCTION TO BIOLOGY Spring 2015

Instructor: Dr. Begona de Velasco
E-mail: develab@wlaac.edu (best way to reach me)
Office hours: Tuesday 7:45-8:00, Friday via email, OR by appointment
Times: T 6:45–10 pm, Room: MSA-005

Course Description: This is a course in general biology designed to fulfill a laboratory science requirement. This class will provide with a solid foundation for advanced courses in biology, human anatomy, physiology, and microbiology. The lecture class will emphasize concepts ranging from the basic principles in biology, cell structure & function, to the levels of organization in the human body. Topics presented in class include the scientific method, biological chemistry, cellular structure, division and energy, heredity, biotechnology, evolution, ecology, general concepts of human biology and a brief survey of: viruses, bacteria, protist, fungi and animals.

Student Learning Outcomes: Upon completion of this course, students should be able to:

1. Explain the scientific method, its applications & limitations
2. Describe the general characteristics of life.
3. Explain the basic levels of biological organization of matter, from atoms to biomes.
4. Distinguish between the four types of macromolecules (lipids, carbohydrates, proteins, and nucleic acids) based on their monomers and functions.
5. Describe the uniqueness of a prokaryotic and eukaryotic cell cells including their components and functions.
6. Enumerate how cells reproduce and how organisms reproduce.
7. Describe the production of energy by cells and how it is used, cellular respiration and photosynthesis. the mechanisms of evolutionary adaptation.
8. Explain the inheritance & transmission of different genetic traits.
9. Give details of the the structure & action of genes, from the DNA to RNA to the formation of proteins.
10. Relate evolutionary events with advantageous changes to the body structure, for each animal phylum.
11. Explain the importance of an ecologically friendly life style with special attention to sustainable resources.
12. Describe the structure & function of the different organ systems in the body.

Computer/Information Literacy Expectations: Students in this class are expected to use the college email system and access assigned websites through the internet,. The students should be able to use: a word processing program for writing assignments (e.g., Microsoft Word), power point, and be able to paraphrase concepts without plagiarizing.

Textbook and material: SCANTRON 882-E forms and *Inquiry into Life*, 13nd ed.; Sylvia Mader, McGraw-Hill Companies, ISBN 978-0-07-340344-1 or any other Biology textbook.

POINT DISTRIBUTION:The grade in this course will be calculated as a percentage of points earned on
3 Exams (100 points each)= 300 points
Quizzes-activities= 75 points
Grade Scale (% of total points at the end of the semester): A=100-90%, B=89-80%, C=79-70%, D=69-60%, F=59%-0

Exams: 4 lecture exams will be given during the semester and the lowest will be dropped. Exams will be objective questions based on the power point presentations lecture notes and the reading from the textbook. The exams will be in the format of multiple choice questions, fill-in the blank, matching concepts, and true/false. Study guide questions and homework questions will be the base for the exams. There is **NO makeup exams**, if you miss an exam (due to an emergency) your last exam will count double. I reserve the right to curve individual exams if necessary. *I reserve the right to test on any material covered in the book or readings, even if the material was not discussed in class.*

Quizzes and other activities points will be earned during class time, dates will be announced in class. Up to 75 points only will count only towards your grade. Any extra points obtained above this limit will NOT count towards the grade.

There will be **homework** for you to do before and after lectures. It is up to you to do it in a time manner. Sometimes I may ask for it but it will not receive points towards the grade. It will be taken in consideration for those that few points may make a difference in a grade bracket.

CLASS POLICIES

Class meetings are to clarify and expand on your readings. All readings from the book, study questions, and homework are your responsibility to complete. If there is anything you do not understand, I want you to feel free to ask questions during lectures as discussions are welcomed (time permitting). You are also encouraged to see me if you need any extra help. Be respectful. Respect includes: **on time** attendance, **no laptops for MOVIES, no cell phones, texting, or headphones.** According to Administration regulation E13, attendance is mandatory. Whenever absences, in hours, exceed the number of hours the class meets per week, the instructor will drop the student. **YOU** are responsible for information, exam announcements, date changes, etc. presented in class, whether or not you are present
There is a NO Eating and Drinking policy in the classroom.

No cheating or plagiarizing: no copy from some else work or EXAM **(will take pictures if needed)** Cutting and pasting from the internet is plagiarism. This course will be conducted in accordance with the College Policy on Academic Integrity. Academic dishonesty, including cheating or plagiarism, will be subject to standard disciplinary procedure, which may result in a grade of F for the course, which may not be appealed or repeated and canceled.

Religious observances: Please notify me in advance of religious observances that interfere with class attendance.

Students with disabilities: Students with disabilities should inform the instructor especially if there are medical problems or learning disabilities. If you require accommodations as per ADA, you must register with the college' disabled student services and inform me (in writing) prior to the end of the 2nd week of class.

Tips for Success: This is a difficult class for many students. It requires a serious commitment of time and energy. Successful students usually have utilized the following strategies;

- Budget 3 hours/week. Utilized the extra resources available (course website)
- Have excellent class attendance. Participate in class discussions, ask questions. Form study groups.
- Students missing more than 2 lectures will be strongly advised to **withdraw** from the class.

TENTATIVE SCHEDULE: the instructor reserves the right to make changes as necessary to this syllabus. If changes are necessitated during the ten of the course, the instructor will immediately notify students of such changes.

Date	Topic	Chapters
Feb 10	Introduction; Macromolecules	1(1,3,4); 2
Feb 17	RTT-mutations	25(1,2,3,5)
Feb 24	Biotechnology	26
March 3	EXAM 1 , cell	3
March 10	Cell division, cellular energy	5, 7,8
March 17	Genetics	23, 24(1,3)
March 24	Evolution	27(1-3), 31(4)
March 31	Cesar Chavez	
April 7	SRING BREAK	
April 14	EXAM 2 , virus-bacteria	28
April 21	Protist-Fungi,	28,
April 28	Animals	30, 31 (1-3)
May 5	Ecology	33(1-3), 34(1,2), 35(2,3)
May 12	EXAM 3 , Human body	13(1,3), 14(1,2), 15(1,2)
May 19	Human body	16(1,2), 17(2-4), 19(1-3)
May 26	Human body	12(1-4), 20(1-5)
June 2	EXAM 4	