Biological Science

BSC 1005 online Summer 2017

INSTRUCTOR: Ms. Amita Engineer
OFFICE HOURS: N/A (contact by email)
EMAIL: aengineer@valenciacollege.edu

The best way to contact me is via email using the link « Email your Prof » within the course on BlackBoard. I usually respond within 24-48 hours.

CLASS MEETS: Online

Blackboard: This is an online, Blackboard course. The website can be accessed by logging on to http://valenciacollege.edu/ and using the Quick Links drop down menu to select Online Courses from the list. Use your Atlas account ID and password to access the course syllabus, assignments, quizzes and handouts etc.

There will not be any required meetings on campus and we will NOT have set chat or discussion times each week. You will have access to the course 24/7 and may participate at the times most convenient for you. **This is NOT a self-paced course. There are specific due dates for each assignment, assessment, discussion board etc.

CREDITS: 3

REQUIRED TEXT: *Biology: Concepts and Applications*, 9th edition; Starr, Evers, and Starr. 978-1-285-42781-2 **(ISBN: 978-1-305-51296-2) ONLY available at the bookstore is special for Valencia**

PREREQUISITES: None

WITHDRAWAL DEADLINE: For the **drop/refund deadline** for Fall semester go to http://valenciacollege.edu/calendar and click on "Withdrawal Deadlines".

COURSE DESCRIPTION:

An introduction to essential principles of biological science. Topics include, but are not limited to, the nature of science and the scientific method, chemistry for biology, cell structure, metabolism, reproduction, and genetics, organisms and ecology. A general education non-majors course, also recommended for students needing preparation before enrolling in a biology course for science majors. May be used as a prerequisite for BSC2093C or MCB2010C when taken in conjunction with BSC1005L, Lab in Applied Biology.

LEARNING OUTCOMES FOR BIOLOGICAL SCIENCE:

The following learning outcomes describe what students should be able to do with their new knowledge at the end of this course.

Students will:

- be able to identify the steps of the scientific method
- analyze practical problems and/or case studies and solve them using the scientific method
- identify basic chemical compounds and their function in organisms

- identify cellular structures and functions
- identify the levels of organization from cells to communities
- identify the structures and functions necessary for survival of organisms
- identify and explain genetic mechanisms and types of reproduction

GRADING SCALE:

The final grade will be determined as a percentage of total possible points earned. Letter grades will be assigned according to the following scale.

A = 90 - 100%

B = 80 - 89%

C = 70 - 79%

D = 60 - 69%

F = Below 60%

Grade Composition: (approximate point values – subject to change)

- 1. Assignments and discussion boards (45% of grade)
- 2. Quizzes (37% of grade)
- 3. Final Exam Comprehensive (18%)

GRADING POLICIES:

If a student takes the final exam, the grade earned for the course will be recorded with the registrar. If a student decides to withdraw prior to the final exam, **it is the student's responsibility** to complete official procedures through the registrar's office.

- 1. All readings, quizzes and assignments **MUST** be completed by the deadlines stated in the syllabus unless otherwise noted.
- 2. Quizzes will be taken online in Blackboard. **Make sure you check availability window.** Quizzes **CANNOT** be made up.
- 3. All information from textbook readings, additional reading material posted, and online discussions may appear on the quizzes and final exam. You are responsible for the material covered.
- 4. It is the student's responsibility to be informed of final exam and quiz dates.
- 5. Discussion Board policies and responsibilities: A BLANK initial post will net a ZERO. Your original answers must be posted no later than noon on the Sunday of each week (due dates). Your responses to the answers of other students are due no later than noon the following day (Monday). Please refer to the "Discussion Board Instructions" document for details.

ATTENDANCE:

- 1. Students are expected to login in to class weekly.
- 2. You cannot make up missed assignments.

If a student fails to complete any online assignments/quizzes for more than 2 weeks, the student is in violation of the attendance policy and may be withdrawn from the course. (http://catalog.valenciacollege.edu/academicpoliciesprocedures/classattendance/)

FINAL EXAM:

Students not taking the final exam will receive 0 for points for that assignment. The 0 will be averaged in as part of the final grade. The final exam is a comprehensive test

that covers all the material assigned in the class i.e. readings, quizzes, discussion topics, powerpoint slides, written assignments etc.

EXPECTED STUDENT CONDUCT

Valencia Community College is dedicated not only to the advancement of knowledge and learning but is concerned with the development of responsible personal and social conduct. By enrolling at Valencia Community College, a student assumes the responsibility for becoming familiar with and abiding by the general rules of conduct. Students who engage in any prohibited or unlawful acts that result in disruption of a class may be directed by the faculty member to leave the class. Violation of any classroom or Valencia's rules may lead to disciplinary action up to and including expulsion from Valencia. Disciplinary action could include being withdrawn from class, disciplinary warning, probation, suspension, expulsion, or other appropriated and authorized actions. You will find the Student Code of Conduct in the current Valencia Student Handbook.

SPECIAL NEEDS:

- Students with disabilities who qualify for academic accommodations must provide a letter from the office for Students with Disabilities (OSD) and discuss specific needs with the professor, preferably during the first two weeks of class. The office for Students with Disabilities determines accommodations based on appropriate documentation of disabilities (Winter Park Campus, room 203; (407-582-6887).
- 2. Please follow the college policy relating to children on campus and make arrangements for childcare outside of classrooms or labs.

Blackboard

You will be using Blackboard to access your on-line quizzes, discussion assignments, course calendar, scores for course work, and all email communications for this course. If you do not presently have a computer, the Library has computers available for you to use

If you have difficulty accessing Blackboard on your computer, or difficulty opening different pages on the class website, you can do several things:

- 1. Contact the online Student Resources http://valenciacollege.edu/oit/ltad/studentResources/
- 2. Contact Valencia Student Help at 407-582-5600 (available 24/7)
- 3. Use computers in the Library

If you experience problems with Blackboard, try these above options immediately. If these options fail to take care of the problem, contact me as soon as possible. You are responsible for insuring that you receive all and any information relating to this course!

Netiquette (Discussion Boards and email): The term "netiquette" refers to the awareness of the need for a certain code of behavior (etiquette) in electronic environments (the net)...Net + Etiquette = netiquette.

In order to maintain a positive online environment for our class, we all need to follow the netiquette guidelines summarized below.

All students are expected to:

- Show respect for the instructor and for other students in the class
- Respect the privacy of other students
- Express differences of opinion in a polite and rational way
- Maintain an environment of constructive criticism when commenting on the work of other students
- Avoid bringing up irrelevant topics when involved in group discussions or other collaborative activities

The following list summarizes the kind of behavior that is not acceptable. Each item listed below is grounds for removal from the class.

Students should not:

- Show disrespect for the instructor or for other students in the class
- Send messages or comments that are threatening, harassing, or offensive
- Use inappropriate or offensive language
- Convey a hostile or confrontational tone when communicating or working collaboratively with other students

If I feel that a student is violating any of the above guidelines, I will contact that student to discuss the situation. If you feel that a student is behaving inappropriately, please send me a private email message explaining the situation as soon as possible.

If you are engaging in electronic environments as a member of this class then you are subject to the same expectations and rules of conduct any teacher or administrator might expect of you in a face-to-face environment. Additionally, whether or not you are entering an electronic environment as a member of the class, if you are doing so via a Blackboard or Atlas account, you are legally responsible to abide by Valencia's policies and expectations.

COMPETENCIES:

Valencia faculty defined four interrelated competencies (**Think, Value, Communicate, and Act**) that prepare students to succeed in the world community.

Think: Think clearly, critically and creatively, analyze, synthesize, evaluate concepts and draw well-supported conclusions.

Value: Articulate a considered and self-determined set of values.

Communicate: Employ methods of communication appropriate to your audience and purpose.

Act: Act purposefully, effectively, and responsibly.

This course will further develop your mastery of these competencies through classroom lectures and discussions, group work, and class activities. The class will also reinforce skills and competencies applicable to CLAST.

Tentative Class Schedule

Wk of	TOPICS	ASSIGNMENTS DUE	READINGS
May 7 Week one	Learning Unit: Introduction to Biology	Complete Discussion #1 Introduction. Closes May 15.	Ch 1
May 14 Week two	Learning Unit: Chemistry of Life	Complete Discussion #2, topic and replies. Closes May 22.	Ch 2
May 21 Week three	Learning Unit: Molecules of Life	Quiz #1 (Chapters 1, 2, 3) due by May 29.	Ch 3
May 28 Week four	Learning Unit: Cell Structure	Complete Discussion #3, topic and replies. Closes June 5.	Ch 4
June 4 Week five	Learning Unit: Metabolism	Complete Discussion #4, topic and replies. Closes June 12.	Ch 5
June 11 Week six	Learning Unit: Photosynthesis	Quiz #2 (Chapters 4, 5 and 6) due by June 19.	Ch 6
June 18 Week seven	Learning Unit: Respiration/Energy Release in Cells	Complete Discussion #5, topic and replies. Closes June 26.	Ch 7
June 25 Week eight	Learning Unit: DNA Structure and Protein Synthesis	Quiz #3 (Chapters 7, 8, and 9) due July 3.	Ch 8 Ch 9
July 2 Week nine	Learning Unit: Biotechnology	Complete Discussion #6, topic and replies. Closes July 10.	Ch 15
July 9 Week ten	Learning Unit: Mitosis and Meiosis	Quiz #4 (Chapters 15, 11 & 12) due July 17.	Ch 11 Ch 12
July 16 Week eleven	Learning Unit: Patterns of Inheritance	Genetics Problems due July 24	Ch 13
July 23 Week twelve	Learning Unit: Human Inheritance	Quiz #5 (Chapters 13, 14) due July 26	Ch 14
Finals	Comprehensive Final Exam		All Chs above
DUE BY 11:59 pm on July 31st			

Disclaimer:

The instructor reserves the right to change and/or modify the content, procedures and policies of this course at any time. The instructor will notify you, in advance, of any necessary accommodations.