BSC 1010 (4-credit hours) Fundamentals of Biology - Tentative Syllabus

INSTRUCTOR Adele Balmer

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TIME M-W Lecture in AHS 210 – 4:00-5:15 PM

W Lab in AHS 321-5:30-8:15 PM

TEXT/MATERIALS Required – Campbell Biology Volume 1 w/ Custom MODIFIED

MasteringBiology ISBN: 1269917943

*PLEASE TAKE NOTE: This package is custom specifically for Valencia College and is sold at a price negotiated directly with the publisher and can ONLY be purchased from the bookstore or directly from Pearson online via your Blackboard course registration process (access card w/ebook is only option that's available for purchase from Pearson online). Access codes purchased elsewhere WILL NOT WORK.

Lab

Lab Manual

Permanent Marker

Lab Coat

Stapler / Paper Clips

COURSE DESCRIPTION Introduction to fundamental biological principles emphasizing common

attributes of all living organisms. Unifying concepts including chemical structure of living matter, structure and function of the cell, specialized cells, major metabolic functions, control systems, reproduction, genetics,

evolution and ecology. Prerequisite for advanced biology courses.

Students should be prepared to complete college level reading, writing,

and mathematics assignments as part of this course.

COURSE OBJECTIVES This course is a combined lecture and laboratory course designed to

provide an overview of many biological systems. Throughout the course, we will develop critical thinking skills and explore while applying the

scientific method.

VALENCIA STUDENT CORE COMPETENCIES

Think: clearly, critically and creatively, analyze, synthesize, integrate and

evaluate.

Value: make reasoned value judgment and responsible commitments.

Communicate: with different audiences and using varied means.

Act: purposefully, reflectively and responsibly.

WITHDRAWL

Withdrawal Deadline with Refund – January 19th Withdrawal Deadline with "W" Grade – April 1st

Students on Bright Futures scholarships who withdraw or are withdrawn

from a class must pay the college for the cost of the class

ATTENDANCE

Make-up exams: If you miss an exam you must contact the instructor within 24 hours of the exam date and submit documentation to justify the absence (ex. doctor's note stating the student could not attend class, accident report, etc.) upon your return to campus. Exams can be missed only under extreme circumstances and they are excused at the discretion of the instructor. Make-up exams may be in the form of essay questions and must be taken within 24 hours of your return to campus.

The College believes that regular attendance and class participation are significant factors that promote success in college. Students are expected to attend all lectures unless unavoidable emergencies prevent attendance. Documented absences will be dealt with on a case-by-case basis. Roll will be taken at the beginning of every class to keep track of your attendance for administrative purposes. If you come in late please make sure that you are marked as present at the end of the class.

If you are absent it is **your** responsibility to make up any missed work and obtain missed materials and announcements from your peers (suggestion: get contact information from a few other students).

The labs are an integral part of the course and you are required to attend all laboratory sessions. There will be a short quiz at the beginning of each lab session. You must be seated in the lab room at the correct time in order to take the quiz. If you are late you may not be able to take the quiz. Laboratory sessions cannot be made up, this includes the reports, quizzes and the practical. If you have a valid, documentable reason for missing a lab, you must contact the instructor within 24 hours of the lab to not be penalized. You must present your documentation to the instructor upon your return to campus.

STUDENT WITH DISABILITES

Students with disabilities who qualify for academic accommodations must provide a notification from the Office for Students with Disabilities (OSD) and discuss specific needs with the instructor, preferably during the first two weeks of class. The Office for Students with Disabilities determines accommodations based on appropriate documentation of disabilities.

GRADING SCALE

A: 100-90

C: 79.9-70

F: 59.9-0

B: 89.9-80

D: 69.9-60

METHOD OF COURSE EVALUATION

5 Chapter Exams: 50% (100 points/exam)

Final Exam: 10% (100 points)

Assignments: 16.5%

Lab Reports/Quizzes: 20% (17 points/lab)

Lab Practical: 3.5% (35 points)

Total: 100% (1000 points)

Exams: Exams will include multiple choice and fill-in-the-blank questions and will be based on both the lecture material, homework, and chapter readings.

Lab Reports: To be turned on the day of lab unless instructed differently. Late lab reports will not be accepted. *Copied lab reports will be viewed as academic dishonesty and will be handled accordingly.* Students are advised to take lab work seriously. There will be a **quiz** at the beginning of each lab. You must be seated in the lab room at the correct time in order to take the quiz.

Assignments: There will be a pre-lecture reading assignment and end of the chapter homework assignment for each chapter. Both of these assignments are located in MasteringBiology on Blackboard. **Go to MasteringBiology for due dates.**

You are responsible for keeping a record of all graded documents throughout the semester.

COMPUTERS/PHONES

Refrain from checking email or recreational use of the internet during class and restrict your laptop and phone activities to note taking or looking up items pertinent to class discussion. You will be asked to leave if you are distracting your classmates or the instructor with non-class related activities on your phone or computer.

COMMUNICATION

The official form of communication in this class is through Valencia e-mail. Grades, labs, study notes and helpful information will be found on blackboard and MasteringBiology, however all messages to the instructor should be sent to abalmer@valenciacollege.edu

ACADEMIC DISHONESTY

E-mail communication with the instructor in this class should be considered formal, similar to other business-style email correspondence. Inappropriate e-mails will not receive a response. Please restrict your email correspondence to issues of class business and questions that are not answered on the syllabus. Please use appropriate capitalization, spell out words completely, and sign your complete name. Your e-mail will usually be answered within 2 business days. Privacy issues prevent your instructor from discussing grades via email. If you have substantive questions about course content, please see your instructor after class. All forms of academic dishonesty are prohibited at Valencia College. Academic dishonesty includes, but is not limited to, acts or attempted acts of plagiarism, cheating, furnishing false information, forgery, alteration or misuse of documents, misconduct during a testing situation, facilitating academic dishonesty, and misuse of identification with intent to defraud or deceive.

The instructor may choose to consider the act of academic dishonesty to be an academic offense. Academic penalties may include, without limitation, one or more of the following: loss of credit for an assignment, examination, or project; withdrawal from course; a reduction in the course grade; or a grade of "F" in the course.

The instructor may choose to consider the act of academic dishonesty to be a violation of the Valencia Student Code of Conduct, and may refer the matter for resolution in accordance with Policy 6Hx28:8-03. Disciplinary penalties for academic dishonest may include, without limitation, warning, probation, suspension and/or expulsion from the College.

MASTERING BIOLOGY

Assignments have been created using the custom version of Pearson's online adaptive learning software known as MasteringBiology. If you have purchased a new copy of the textbook you will find an access code for MasteringBiology bundled with the book. If you have purchased a used book or have a version other than the Valencia custom edition, you will need to purchase a subscription to MasteringBiology through the portal found in the Blackboard page for this class. This will cost \$55 for the semester.

DISCLAMER

Changes in this syllabus and/or the class schedule may be made at any time during the session by announcement. A revised syllabus may be issued at that time. Grades, assignments, labs and all other documents for the course are found on blackboard.

Tentative Course Schedule: Read the assigned chapters listed below **before** coming to class.

Week	LECTURE	LABORATORY
January 11	Chapter 1: Introduction – Themes in the Study of Life Chapter 2: The Chemical Context of Life	Lab 1 - The Scientific Method
January 18	No Class Monday Chapter 3: Water and Life	Lab 2 - Atoms and Molecules
January 25	Chapter 4: Carbon and the Molecular Diversity of Life	Lab 3 - Use of the Microscope
February 1	Exam 1 (Chapters 1-4) Chapter 5: The Structure and Function of Large Biological Molecules	Lab 4 - The Cell
February 8	Chapter 6: A Tour of the Cell	Lab 5 Diffusion I
February 15	Chapter 7: Membrane Structure and Function	Lab 6 Diffusion II
February 22	Exam 2 (Chapters 5-7) Chapter 8: An Introduction to Metabolism	Lab Practical (cont. with lecture)
February 29	Chapter 9: Cellular Respiration and Fermentation	Lab 7 – Enzymes (cont. with lecture)
March 7	Spring Break – No Class	Spring Break – No Lab
March 14	Chapter 10: Photosynthesis Chapter 12: The Cell Cycle	Lab 8 -Respiration
March 21	Exam 3 (Chapters 8-10) Chapter 13: Meiosis and Sexual Life Cycles	Lab 9 - Photosynthesis
March 28	Chapter 14: Mendel and the Gene Idea	Lab 10 - Mitosis and Meiosis (cont. with lecture)
April 4	Exam 4 (Chapters 12-14) Chapter 15: The Chromosomal Basis of Inheritance	Lab 11 - Mendelian Genetics
April 11	Chapter 16: The Molecular Basis of Inheritance Chapter 17: From Gene to Protein	Lab 12 - Human Phenotypes
April 18	Finish Lecture / Review	Exam 5 (Chapters 15-17)
April 25	Cumulative Final Exam - 5:00 PM AHS 210	

(NOTE: This is a tentative schedule and the instructor reserves the right to change this schedule without notice)