

TENTATIVE GENERAL INFORMATION, SYLLABUS AND COURSE OBJECTIVES

Biology 114

Fall, 2011

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Conference Hours: By appointment: 2.00-3.30. Room 2831

BOOK:

Biology: Course Text: The textbook for the course is Campbell Essential Biology 4th Edition, Authors: Simon, Reece, and Dickey (ISBN-13: 032175056X; 0321763254) with the Course Compass Student Access Kit. The Laboratory Manual for BIO 114 (ISBN-13:0558652964).

Materials: Basic stuff you needed in your High School Science Class!!

Course Description:

1. Orient you to the mysteries of the biological world.
2. Lecture and laboratory course emphasizing scientific enquiry how the cells walk, talk, breath, their eating habits, their health issues!!!. We will address the organization of cells. If you can describe the organization of a cells living room, dining room kitchen, nuclear bed room and the organization of the entry and exit doors then we all are on the same page. (cell membrane, and proteins).

Course Objectives: Upon completion of this course, the student will be able to:

1. Demonstrate proper use of the scientific method for investigation of biological problems.
2. Demonstrate competence in performing laboratory activities, analysis and interpretation of data, and clear communication of valid conclusions.
3. Communicate understanding of biological principles verbally and in written form.
4. Use the insights gained from exposure to scientific principles to make informed decisions concerning biological issues with personal and social implications.

Chapters To be Covered:

Course Organization

Unit 1: Introduction and scientific method

Unit 2: Chemical foundations of life

Unit 3: Cell structure and function

Unit 4: Energy transformation

(Introduction-enzymes)

Unit 5: Cell reproduction

(Mitosis and Meiosis)

Unit 6: Genetics (Biotechnology)

Unit 7: Evolution

Unit 8: Ecology

Chapters to be covered:

Chapter 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 and chapters 13-20.

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Instructional Methods:

A. Study of Assigned Readings

You have a reading assignment for each unit. Your teacher expects you to study the assignment before its presentation in class.

Here are some study suggestions that other students have found helpful.

1. **Read** your assignment through at least twice.
2. **Outline** your reading assignment. Each chapter is divided into numbered sections; each section is divided into paragraphs. This organization by the author can be used to build your own outline.
3. **Underline** the most important ideas in your reading assignment.
4. **Recognize and use** new words. Biology like most other areas of knowledge has its own vocabulary. Many of these words are listed in the last objective of each unit.
5. **Write** questions about things in the assignment you do not understand.

B. Lecture and Discussion

Your teacher explains the contents of the unit. You will discover that many of the questions you prepared during your studying will be answered.

1. **Write down in your own words** the main ideas your teacher presents.
2. **Compare** these ideas with the outline and questions you prepared before class.
3. **Ask** questions about the things you still do not understand.

C. Audio and Visual Materials

Movies, film strips, models, pictures, and a variety of other materials will be used by your instructor to help you understand the main ideas of the course. Your teacher will expect you to know **what** you are to do, **why** you are to do it, and to be able to **explain** the ideas relating to each activity.

D. Use of Online resource:

This course requires students to use the web resource available for this textbook. The web site **Coursecompass.com** features animations, questions and other text materials online. Quizzes, exams, discussion boards and information will be done online. It is imperative that students be prepared to explore and learn the online tools. A separate disk containing registration information, login codes and required details will come with the book IF YOU BUY A NEW one. If NOT and you have a USED book, you will need to purchase this disk separately. The disks are available at the Beck's bookstore on Broadway.

How your grade is determined/methods of evaluation:

Grades in General Biology are determined by a point system. Points are earned through examinations, quizzes, labs and written assignments and oral presentations and discussions. Your final grade is based on the cumulative total percentage of exams, quizzes, laboratory assignments and homework given and class participation and discussion.

Cumulative Percentage Based on 1000 points

90 - 100
80 - 89
66 - 79
50 - 65
Below 50

Grade

A
B
C
D
F

Category

Points

(No attendance points if you have missed 4 classes)

3 EXAMS	300 Points (Exam 1: Chapters 1-5, Exam 2: Chapters 6-10)
Home assignments :	50Points
Power point presentations: presentation)	50 Points (Choose a topic in Biology) Report and 15 minute
Attendance	50 Points
Finals:	150 Points (Comprehensive)
Labs:	100 Points (Lab book)
Total Points:	700 Points

LABS TO BE Covered:

1. **INTRODUCTION TO THE SCIENTIFIC METHOD**
2. **USING THE COMPOUND DISSECTING MICROSCOPES**
3. **FUNCTIONS AND PROPERTIES OF CELLS**
4. **INVESTIGATING CELLULAR RESPIRATION**
5. **ENZYME ACTIVITY**
6. **MITOSIS AND ASEXUAL REPRODUCTION**
7. **HUMAN GENETICS: Blood typing**
8. **Connecting meiosis and genetics: DNA extraction,**

Exams: There are a total of 3 in class exams. All exams are reflective of the lectures, textbook and handouts. Materials given in class may or may not be a part of our textbook but may be included in the exams or quizzes. Each test is a collection

of multiple-choice, fill-in, short essay, true or false questions and is prescheduled. Exams will also include material from laboratory and class exercises. Final will not be comprehensive. Each exam will always have a few applied or indirect questions from the subject matter discussed in the class. **Exams will be announced a week in advance after completing chapters discussed in class.**

Make-Up Exams: Prior permission to postpone a test must be obtained (except in emergency). **NO MORE THAN ONE MAKEUP EXAMINATION** is given without a justifiable reason. Make-up exams must be taken within one week from the date when the test was first given, otherwise a zero score will be given for that test. If you arrange for a make-up and fail to meet for the exam, you will not be given a second opportunity. Make-up examination is not given to those who took the test and did not pass.

Group Discussion: Group discussions require the collective input from all group members. The preparation will require outside class time. How much outside class time will depend on the group.

Individual laboratory write-up: The instructor will provide the details of the laboratory write up. However as a general precautionary rule, students are expected to type their reports and follow the format given to you for papers. The report should be technical and professionalism is expected. Even though group members share the data, NO TWO lab reports can be the same unless written permission has been given by Dr. Onoda. Without permission, identical, lab reports will be considered a result of plagiarism and all parties shall receive zero points for that particular assignment.

Grade Improvement: **THERE ARE NO EXTRA CREDIT ASSIGNMENTS.** For successful class participation; it is essential that you are regular, on time, attentive and finish the assigned exercises neatly and properly. The data obtained from various colleges show a significant correlation between grade and attendance. Two most common mistakes that risk your grade and GPA, are attempts of overnight test preparation and total dependence on your class-notes. For better comprehension of the concepts and terminology, study regularly with

the help of your book and discuss material and concepts with your classmates who are consistently scoring high in each test. You are more than welcome to email me or meet with me regularly to go over materials in class and/or textbook.

Cheating and Plagiarism: Evidence of cheating in the classroom will be met with removal of your test and a zero score. Persons assisting in cheating will be met with the same. Any student caught cheating on an exam, practical, quiz or lab report will be immediately dismissed from the course and given a final grade of “F”, regardless of the student’s total points in the course. Plagiarism will be defined as turning work that is not the student’s original work. Evidence of plagiarism will result in a reduced grade or zero for that activity for all people involved in the plagiarism. Continued plagiarism will result in immediate dismissal from the course and a final grade of “F”, regardless of the student’s total points in the course. The student’s official transcript will reflect the dismissal for cheating or plagiarism.

Withdrawal from the class: If you wish to withdraw, do not discontinue attending class sessions. This does not constitute an official withdrawal. It is your responsibility to get instructor’s approval on the withdrawal form and get it processed. **If your name appears in the final grade list and you have been absent, you will receive an ‘F’ grade for the course.**

Important: Writing assignments as given are appropriate to the discipline and are a part of the course.

Student Conduct: Each student is responsible for adhering to the Code of Student Conduct as stated in the college catalog.

Pagers and Cellular Phones: All pagers and cellular phones must be turned off during lecture and laboratory.

Online resource: Course materials, lecture notes, exams, group discussion boards and grades will be posted and worked through online. The website, coursecompass.com, will be used which comes as a part of the Textbook package if you buy a new one, and if not and you have a used book, you will need to purchase the registration material separate at the bookstore. I will explain about the online system and how it will be used during the course.

Withdrawal from the class: If you wish to withdraw please use the formal drop procedure used by Truman College. It is your responsibility to get instructor’s approval on the withdrawal form and get it processed. **If your name appears in the final grade list and you have been absent, you will receive an ‘F’ grade for the course.**

Being dropped from the class: Per the new guidelines established by Truman College, any student who fails to demonstrate continued class participation and continued progress towards completion of the course will be dropped by the instructor. Continued class participation is demonstrated by attendance (> 70% of lectures and labs). Continued progress towards completion of the course includes, but is not limited to, completion and submission of homework assignments with an earned grade of >50%, maintaining an overall quiz grade average of >50% and maintaining an overall in class test average of >50%.

Grade Appeals: Per Truman College guidelines as documented in the student handbook, student appeals of a final grade must be submitted using the appropriate grade appeal form within 30 days of the end of the semester. The form must be completed correctly to constitute an appeal.

The Disability Access Center is located in room 1428 This is the Center, responsible for verifying that students have a disability -related needs for academic, accommodations and for planning appropriate accommodations, in cooperation with the students themselves and their instructors. Students who need academic accommodations should request them from the DAC Center 773-907-4725 Linda Ford Director Office hours are from 9:00 am-7:00 p.m. Monday -Thursday and Friday from 9:00 a.m. to 4:00 p.m.

- Safety:**
1. **NO EATING, DRINKING, SMOKING OR USING TOBACCO PRODUCTS IN CLASS.**
 2. Students with contacts should consider wearing their glasses during laboratories.
 3. Students who intentionally misuse laboratory equipment or conduct themselves in such a way as to endanger others will be requested to withdraw from the course.
 4. The lab table and laboratory glassware and materials should be cleaned and washed at the beginning and the end of each lab period.
 5. Lab stools should be pushed under the lab tables at the end of each class.
 6. Broken glassware and chemical spills should be reported to the instructor.

Academic Support Services:

Tutoring Center. For students who need help with their assignments: room L129, 773-907-4785, www.trumancollege.edu/studentservices/tutoring.

Student Success and Leadership Institute (SSLI). For students who need various other support services to achieve their educational goals: room 1435, 773-907-4714, www.trumancollege.edu/student-services/ssli.

TRIO Student Support Services. For low-income students, first generation college students, or students with disabilities who need academic support: room 1435, 773-907-4797, www.trumancollege.edu/trio. Registration is required at the start of each semester.

Students with Disabilities--The Disability Access Center is located in room 1428. The Center is responsible for assisting students with disabilities and helps to coordinate and plan appropriate accommodations between the student and their instructors. Students who need academic accommodations should request them from the DAC Center 773-907-4725. Linda Ford is the Director and the office hours are from 9:00 am- 7:00 p.m. Monday – Thursday and Friday 9:00 a.m. 4:00 p.m.