

BIOLOGY 3: Introduction to Life Science

Summer 2014

Instructor: Dr. Shaista Lunden

Office Hours: By Appointment Only

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Class Meetings: LFS Room # 11

M - Th from 12:30 pm – 3:50 pm from 6/23/14 – 7/31/14

*****NO FOOD, BEVERAGE, CELLULAR PHONES, DISRUPTIONS OR PROFANITY AT ANY TIME!!!**

***** I reserve the right to make changes in this syllabus with notification**

I. REQUIRED MATERIALS:

1. Text: Mader, S. Essentials of Biology (custom, 2nd edition) McGraw Hill.
2. Text: Sierra Nevada Natural History (revised ed.)
Storer, T., Usinger, R., & Lukas, D. Univ. of California Press. 2004.
3. Biology 3 Handouts, Summer 2014

II. COURSE DESCRIPTION

A. Title: Biology 3 – Introduction to Life Science

B. Prerequisite: None

C. Summary: This course is recommended for the non-biological science majors. This is an introductory course using biological concepts. The organismal structure, function, inheritance, evolution, and ecology are covered.

III. COURSE OBJECTIVES: STUDENTS WILL LEARN

- a. Microscopy, read, analyzes, evaluate, and discuss the scientific method.
- b. Cell structure, function and levels of organization of living organisms.
- c. Periodic table of the elements and chemistry of biomolecules.
- d. Will read appropriate scientific literature on classification.
- e. **Observe** and document the structure and function of the human body by examining the organ systems: reproduction, respiration, circulation, excretion, and digestion.
- f. Review classical and molecular genetics and learn the process of replication, transcription, and translation.
- g. Perform experiments, observe, and record data.
- h. Plant structure, physiology, and interaction including photosynthesis and aerobic respiration.
- i. Evolution.
- j. Different form of energy and its utilization and recycle

IV. ATTENDANCE:

- You are expected to be on time for each laboratory and lecture session.
- Tardiness may be construed as an absence from the class. It is the students' responsibility to sign in when late and then to see the instructor after class to be sure that an absence has been changed to a tardy!
- Be aware that 3 tardies = 1 absence. This is very important because **if you miss more hours than 5 hours of class or lab, you will be dropped** unless your instructor has been informed of the extenuating circumstances causing your absences.
Reasons for being dropped from the course...

V. COURSE TESTS AND EVALUATIONS (approximate)

A. Grading

Description	Possible Points
5 exams	500
Lecture quizzes	100
Group exercises & pop quizzes	150
Lab. exercises	150
Over all class performance	100
Approximate total points	1000

B. In *most* circumstances the curve for the class is taken from the top grade in the class as long as the top grade is 90% or more from the points possible.

(From the top grade)

90% = A 80% = B 65% = C 55% = D 54% and below = F

C. *Exams* will consist of multiple choice questions and short answers.

D. **All exams will be closed book & and no notes.**

E. *Lab Exercises Grades* will come from your lab work itself. These are to have the answers to laboratory questions on handouts or from your lab guide as well as any problems to work or tables to fill in. Be sure these are neatly done and in the same order as the handouts. Forgotten lab work means no score – as you are responsible for your work. **Policy for missed labs:** If a lab is missed you will not be allowed to make it up. Attending the lab is mandatory. No points will be given for lab work if you were not present during the lab meeting.

F. *Lecture Quizzes* will consist of questions concerning the previous lectures and/or the current day's lecture. These quizzes are closed book and no notes. Quizzes missed due to **tardies may NOT be made up**. Quizzes may also be given at the **end of a laboratory or lecture. Attendance pop quizzes** may also be given at any time either at the beginning, during or at the end of class. You need to be in class at your seat ready to start work when those are given.

VI. ACADEMIC DISHONESTY

Academic dishonesty is unacceptable and will not be tolerated by Reedley College. Cheating, plagiarism and collusion in dishonest activities erode the college's educational and social role in the community.

Cheating is the act of deception by which a student misleadingly demonstrates that he/she has mastered information on an academic exercise. Examples include but are not limited to:

1. Copying or allowing another to copy a test, paper, project, or performance.
2. Using unauthorized materials during a test, for example, notes, formula lists, or "cheat sheets."
3. Taking a test for someone else or permitting someone to take a test for you.

Plagiarism is the act of representing the work of another as one's own without giving credit. Plagiarism includes but is not limited to:

1. Incorporating the ideas or words of another's work without giving appropriate credit.
2. Representing another's artistic or scholarly works, such as musical compositions, computer

programs, photographs, etc., as one's own.

Disciplinary Procedures are outlined in your Reedley College student catalog and are summarized as follows when a faculty member discovers a violation:

1. Conference with student to address allegations
2. Notification of division dean, report for permanent record of student.
3. May give student "F" for assignment or course.
4. If more than one infraction has occurred, the student may go on probation, be suspended, or expelled. An appeal may be made within 15 days of notification.

VII. HELP

If you should have difficulty grasping the material presented during the course be sure to see your instructor at the first sign of trouble. Often, a few minutes can clear up many problems! If you are having trouble studying, perhaps you need a few study hints or a tutor at the Tutorial Center. Please come in for help! Always keep in mind that this is a four-unit course. As a general rule, each hour of lecture requires two hours of additional study outside of the classroom each week. Each hour of lab requires one hour of study time, outside the laboratory each week. This equals eight hours of study each week in order to pass this class. Do your planning accordingly.

I hope you have a fun semester and learn Biology along the way.

Good Luck

Tentative Course Schedule for Biology 03 (MTW&Th from 12:30-3:50 PM)

Summer 2014

This schedule may be modified with notice

WEEK 1			
M	6/23/2014	Orientation, Grading, Goals, Attendance Ch. 1: Introduction to Biology	Microscope Safety and Use
T	6/24/2014	Ch. 2 and 3: Cellular Chemistry Quiz1	Ecosystem class project
W	6/25/2014	Ch. 4 Inside the cell Group Work	Cell Lab
Th	6/26/2014	Quiz 2 Ch. 8 Cellular reproduction	Mitosis Lab
WEEK 2			
M	6/30/2014	Exam 1 (Chapters 1, 2, 3, 4, 8)	No Lab Grading
T	7/1/2014	Ch. 4 Plasma Membranes Ch. 5 Cellular Metabolism Diffusion and Osmosis	Diffusion lab Research project on Biotic Communities
W	7/2/2014	Group work (membrane quiz) Ch. 6: Photosynthesis	Osmosis lab
Th	7/3/2014	Ch. 6: Photosynthesis (continue) Ch. 7: Cellular Respiration	Photosynthesis lab (Paper Chromatography)
WEEK 3			
M	7/7/2014	Ch. 7: Cellular Respiration (continue) Ch. 9 sexual Reproduction	Quiz 3 Review Exam 2
T	7/8/2014	Group Work Meiosis & Quiz 4 Chapter 10 Pattern of Inheritance	Photosynthesis or Resp Lab Review Exam 2
W	7/9/2014	Exam 2: (Chapters 5, 6, 7, 9, 10)	Ch. 11. DNA Biology
Th	7/10/2014	Ch. 11. DNA Biology Ch. 12 Biotechnology & Genomics	Genetics Lab
WEEK 4			
M	7/14/2014	Quiz 5 Ch.13 Genetic Counseling	Micro lab
T	7/15/2014	Ch. 17 Microorganisms	Review Exam 3
W	7/16/2014	Exam 3: (Chapters 11, 12 ,13 & 17)	Ch. 18: Plants and Fungi
Th	7/17/2014	Ch. 18: Plants and Fungi Ch. 19: Animals	Lab: Pollination Video

WEEK 4			
M	7/14/2014	Quiz 5 Ch.13 Genetic Counseling	
T	7/15/2014	Ch. 17 Microorganisms	Review Exam 3
W	7/16/2014	Exam 3: (Chapters 11, 12 ,13 & 17)	Ch. 18: Plants and Fungi
Th	7/17/2014	Ch. 18: Plants and Fungi Ch. 19: Animals	Lab: Pollination Video
WEEK 5			
M	7/21/2014	Ch. 22: Animal Organization Quiz 6	Lab: Diversity of Animals
T	7/22/2014	Ch. 23: Animal Circulation	Lab: Circulation
W	7/23/2014	Quiz 7 Ch. 24: Animal Respiration, Excretion	video resp
Th	7/24/2014	Exam 4. (Chapters 18,19,22,23 & 24)	
WEEK 6			
M	7/28/2014	Ch. 30: Ecology of Populations Quiz 8	Ecosystem class project Due
T	7/29/2014	Ch. 31: Communities and Ecosystems	
W	7/30/2014	Quiz 9 Ch. 32: Human Impact	Review Exam 5
Th	7/31/2014	Exam 5 (Chapters 30,31 &32)	