

COURSE: Introductory Cell Biology, BIO 244, Summer 2008

Note: Students must be enrolled in a lab section, along with the lecture.

INSTRUCTOR: Dr. Joan Hudson

Office: Rm 129 - Lee Drain Building, bio_jxn@shsu.edu, (936) - 294-1541

Office Hours: Available MWF: 12-2 or by appointment

TEXT: *Biological Science, Vol 1, The Cell, Genetics and Development* by Scott Freeman. 3rd ed.

Pearson Prentice Hall, 2008. Bring the text to class each day. It will be to your advantage to have the text with you in order to refer to figures from the text used in lecture.

COURSE OBJECTIVES: The objective of this course is to provide a broad overview of cell biology for science and other majors. The student will: 1) better understand how biological organisms function, 2) learn about the four groups of macromolecules present in all life forms, 3) learn protein structure, function, and synthesis 4) learn nucleic acid chemistry, DNA replication and inheritance, 5) learn cell structure and reproduction, 6) learn organelle structure and function, 7) learn membrane structure and function, 8) learn how cells transform energy and 5) be better able to evaluate scientific studies in cell biology. After taking this course, the student should have a better understanding of cell structure, chemistry and function and be able to use this information in upper level biology classes.

ATTENDANCE: Regular and punctual attendance is expected. Perpetual tardiness will be recorded as absences. Good attendance is no more than 1 class missed. If you will be absent for a university event (ex. music, sport, rodeo etc.), please let me know ahead of time. Attendance will be taken each day. A seating assignment chart and sign-up sheet will be used to take attendance.

GRADING: Four HOURLY exams (100 points each). The fourth exam is the final exam. Lab is 100 points. Total points in this class = 500 points. **There are no extra credit points or activities for extra credit.**

Final grade determination:

A = 90% - 100% (450-500 points) B = 80% - 89% (400-449 points)

C = 70% - 79% (350-399 points) D = 60% - 69% (300-349 points)

F = 0% - 59% (0-299 points)

EXAMS: The exams will have multiple choice questions (using Scantron 882). The majority of the material on the exams will come from the lecture notes. The vast majority of lecture notes will come from the text. Revising your lecture notes is highly recommended. **There are no extra credit points.**

MAKE-UP POLICY: Lecture exams can be taken at a different time, only with an excused absence. If not taken at the scheduled time, a completely essay exam will be given as a make-up exam. There are no exceptions. (To avoid taking an all essay exam, take the exam during the regularly scheduled time.)

ACADEMIC DISHONESTY: The Student Code and Faculty Handbook will be followed in the event of academic dishonesty. Any form of cheating will not be tolerated.

STUDENTS WITH DISABILITIES: Students with any type of disability that may prevent them from fully demonstrating their abilities in this class should contact me as soon as possible. We can work together to come up with a plan to assist you with this course.

LAB: Information will be provided in lab concerning the laboratory part of this class. Lab exercises will be completed and turned in for a total of 100 points. No labs will be dropped. Failure to turn in even one lab, may seriously impact your final grade in this class.

Laboratory exercises for BIO 244, Summer I, 2008

Lab 1: Introduction; Chemistry for Cell Biologists

Lab 2: Chemistry for Cell Biologists

Lab 3: Modeling of Protein Structure

Lab 4: Chemistry of Food

Lab 5: Osmosis and Diffusion

Lab 6: Endosymbiotic Origins of Mitochondria and Chloroplasts

Lab 7: Cellular Respiration

Lab 8: Photosynthesis

Lab 9: Scientific Writing; Cancer

Lab 10: Pedigree Analysis

Lab 11: Polygenic Inheritance

Lab 12: Polymerase Chain Reaction

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	June	3 10-12: Introduction Chapter 1	4 10-12: Chapter 2 Labs 1 & 9	5 10-12: Chapters 2,3 Labs 1 & 9	6 10-12: Chapter 3	7
8	9 10-12 Chapter 4 Lab 2	10 10-11: Exam 1 Chapter 5 Lab 2	11 10-12: 11-12: Chapter 6 Labs 3 & 4	12 10-12: Chapter 7 Labs 3 & 4	13 10-12: Chapter 8	14
15	16 10-12: Chapter 9 Labs 5& 6	17 10-11: Exam 2 Chapter 10 Labs 5 & 6	18 10-12: 11-12: Chapter 11 Lab 7	19 10-12: Chapter 12 Lab 7	20 10-12: Chapter 13	21
22	23 10-11: Exam 3 11-12: Chapter 13 Lab 8	24 10-12: Chapter 14 Lab 8	25 10-12: Chapter 15 Labs 10, 11, 12	26 10-12: Chapter 16 Labs 10, 11, 12	27 10-12: Chapter 17	28
29	30 10-12: Chapter 18	July 1 10-12: Final Exam	2	3	4	5