

LS4- 2 Spring, 2007
Dr. Christensen Lecture MWF

Date	Topic
4/2	Gregor Mendel and the Laws of Inheritance
4/4	Probability and the Dihybrid Cross
4/6	Mitosis, Meiosis and Chromosome Segregation
4/9	Analysis of Human Pedigrees
4/11	Sex-linked Inheritance
4/13	Gene Interaction and Phenotype
4/16	Gene Linkage and Chromosome Recombination
4/18	Gene Mapping
4/20	The Structure of the Gene
4/23	Exam 1- Through Gene Mapping- In Class Review with TAs
4/25	Gene Regulation
4/27	Mutation
4/30	Gene Function and Biochemical Pathways
5/2	Genetic Screens
5/4	Bacterial Genetics I - Conjugation
5/7	Bacterial Genetics II - Transduction
5/9	The Human Genome
5/11	Population Genetics and Hardy-Weinberg
5/14	Exam 2- Through The Human Genome-In Class Review with TAs
5/16	Inbreeding
5/18	Molecular Markers
5/21	Mitochondrial Eve and Thomas Jefferson's Y
5/23	Gene Cloning
5/25	Evolutionary Genetics
5/28	Memorial Day Holiday- No Class
5/30	Epigenetics
6/1	Recombinant DNA Technology
6/4	Stem Cells and Cell Differentiation
6/6	Human Genetic Disease
6/28	Final Discussion- Course Evaluation

Contact Information: Email- sioux@ucla.edu. Office hours Mon 12-1 pm and 2-3 pm, room 414B, Botany.

Course Materials: Textbook is *Principles of Genetics*; Fourth edition; by Snustad and Simmons. Purchase of the book allows you to access supplementary online material, such as self quizzes, tutorials etc. at the website <http://edugen.wiley.com/edugen/class/cls36346/> The text can also be purchased as an online only version at wiley.com/college/buywileyplus. Copies of the book will also be placed on reserve at Powell Library.

Grading: 2 midterms- 100 points each (200 points). Cumulative final (200 points). Total 400 points.

Midterms: Midterms will be held on April 23rd and May 14th from 5-6:30 pm. Location TBA.

Discussion Section: TAs will answer questions about lecture material and problem solving. No discussion sections will be held on the first week of class.

Problem Sets: Problem sets will be assigned weekly. These questions are very similar to the problems that will be assigned on the midterms. Answers to the weekly problem sets will be available ONLY from your TA during discussion section and will not be posted on the course web site.

Office hours: Each of the five TAs will hold weekly office hours. You can go to any TA for office hours, irrespective of which TA leads your discussion section. Office hours and locations will be posted on the web site. Additional office hours will be held during normal lecture hours on the day of the of midterms.

Regrade policy: Regrades will only be considered for exams written in permanent blue or black ink. All regarding requests must be submitted in writing to the LS Core Office.

Course Web Site: The course web site is <http://www.lsic.ucla.edu/classes/spring07/>. Course information including the syllabus, class announcements, power point lecture slides, office hours, problem sets and and practice midterms will be posted on the site.

Administrative Issues: For enrollment, illness absences of any other questions that do not directly pertain to the material covered in the course, contact Mark Katayama Student Affairs Officer, Life Sciences Core Curriculum, Office: (310) 825-6614.

Assigned Reading:

Lecture 1: Chapter 1– all

Lecture 2: Chapter 2- pp. 42-53

Lecture 3: Chapter 5- pp. 85-93.

Lecture 4: Chapter 3- pp 53-59.

Lecture 5: Chapter 5- pp 93-101.

Lecture 6: Chapter 4- all.

Lecture 7: Chapter 3- pp. 51-53; Chapter 7- pp.129-135.

Lecture 8: Chapter 3- pp. 136-145.