Molecular Biology 380.01
Spring 2002

Professor Leslie Gregg-Jolly
Rm. 1206, ext. 4978
Email: Greggjol
Office hours: Tue. 2:30 - 4:00 pm
Fri. 10:00 - 11:00 am, or Email for appointment

Course web site:
URL: http://web.grinnell.edu/courses/Bio/S02/bio380-01/

Course list-serve:
bio380-01lgjs02@lyris.grinnell.edu

Required texts:


3. a reference text, preferably from one of the following (in order of recommendation):

   Lewin, B. Genes VII. 2000, Oxford University Press, NY


Lecture schedule 2002:
I. Techniques

   Tues. Jan. 22 Introduction/overview of cloning
   Chapters 1-3 and 6

   Thurs. Jan. 24 Introduction to Southern analysis for lab

   Tues. Jan. 29 Principles of DNA isolation

   Thurs. Jan. 31 Vectors
   Chapters 4 & 5

   Tues. Feb. 5 Vectors and making libraries
Thurs. Feb. 7  screening libraries
Chapter 7
(literature citations for presentation due)

Tues. Feb. 12  DNA analysis: sequencing and PCR
(initial project consultations this week)

II. Applications of Molecular Biology

Thurs. Feb. 14  Student presentations
Tues. Feb. 19  Student presentations
Thurs. Feb. 21  Conferences for independent projects
Tues. Feb. 26  Conferences for independent projects
Thurs. Feb. 28  Introduction to microarrays
(Bibliography for project proposals is due)

Tues. Mar. 5  *Introduction to cell cycle regulation*

Thurs. Mar. 7  Tentative field trip
Tues. Mar. 12  Presentations of student proposals
*cell cycle regulation*, Dr. Thomas Coleman

Thurs. Mar. 14  Presentations of student proposals
Written proposal due in class

**Spring Break**

Tues. Apr. 2  Genomics
Thurs. Apr. 4  Genomics

III. Topics in Molecular Biology (subject to change)

Tues. Apr. 9  Molecular switches/responding to the environment
Dr. Steve Finkel

Thurs. Apr. 11  Molecular switches/responding to the environment
Tues. Apr. 16  Lab meeting/progress reports
Thurs. Apr. 18  Lab meeting/progress reports
Tues. Apr. 23  Pathogenesis? Dr. Janelle Hare
Thurs. Apr. 25  Pathogenesis?
Tues. Apr. 30  Pathogenesis?
Thurs. May 2  Social and ethical implications of molecular biology
Tues. May 7  Social and ethical implications of molecular biology
Thurs. May 9  Final paper due, 2 copies
Wed. May 15  Portfolio due