Biology 65 Syllabus Fall 2012

Professor

Natasha Grotz 231 LSC 6-0120

Lectures

105 LSC

MWF 11:15-12:20

Office Hours

Office hours will be held by appointment; please e-mail me to schedule a meeting.

Grading

Participation: 10% Presentation 1: 30% Presentation 2: 30% Final Paper: 30%

Web Site

The Blackboard web site for the course will contain the pdfs of papers and the Powerpoint slides used during lecture.

Note to Students with Physical or Learning Disabilities

I encourage students with documented disabilities, including "invisible" disabilities like chronic diseases and learning disabilities, to discuss with me the appropriate accommodations that might be helpful. Please contact me during the first week of class so that we have the time to implement any accommodations. All discussions will remain confidential.

Religious Observances

Some students may wish to take part in religious observances that fall during this academic term. Should you have a religious observance that conflicts with your participation in the course, please come speak with me before the end of the second week of the term to discuss appropriate accommodations.

Academic Honor Principle

The Dartmouth College Student Handbook states "Fundamental to the principle of independent learning are the requirements of honesty and integrity in the performance of academic assignments, both in the classroom and outside. Dartmouth operates on the principle of academic honor, without proctoring of examinations. Students who submit work which is not their own or who commit other acts of academic dishonesty forfeit the opportunity to continue at Dartmouth."

Honesty is the foundation of the academic pursuit of knowledge. In recognition of this, the faculty of Biology 65 will not overlook any violations of the Academic Honor Principle. Indeed, the Faculty Handbook of Dartmouth College states explicitly that College Faculty is obligated to report potential violations of the Academic Honor Principle to the Dartmouth College Committee on Standards.

Topics

Transcription Techniques Transcription Mediator Chromatin Transcriptional Activation/Repression Transcriptional Repression/Repression **Insulators and Silencers RNA Processing** Alternative Splicing mRNA stability RNA interference Regulated Translation Protein Stability/Regulated Degradation Post-translational Modifications **Protein Targeting** Regulated Localization

Course Schedule: Current Topics in Molecular Genetics, Gene Regulation in Eukaryotes

| Lecture Date | Торіс |
|---------------------|---|
| 9/10-M | Intro |
| 9/12-W | Transcription Techniques |
| 9/14-F | Transcription |
| 9/17-M | Chromatin |
| 9/19-W | Transcriptional Activation/Repression |
| 9/21-F | Transcriptional Activation/Repression |
| 9/24-M | Insulators and Silencers |
| 9/26-W | RNA Processing |
| 9/28-F | Alternative Splicing |
| 10/1-M | Student Presentations |
| 10/3-W | Student Presentations |
| 10/5-F | Student Presentations |
| 10/8-M | Student Presentations |
| 10/10-W | Student Presentations |
| 10/12-F | Student Presentations |
| 10/15-M | Student Presentations |
| 10/17-W | Student Presentations |
| 10/19-F | Student Presentations |
| 10/22-M | Student Presentations |
| 10/24-W | Student Presentations |
| 10/26-F | Homecoming Friday/Student Presentations |
| 10/29-M | Student Presentations |
| 10/31-W | Student Presentations |
| 11/2-F | Student Presentations |
| 11/5-M | Student Presentations |
| 11/7-W | Student Presentations |
| 11/9-F | Student Presentations |
| 11/12-M | Student Presentations |