

**Syllabus**

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Office: HS G42

Textbook: **Required:** Lewis, Ricki. Human Genetics: Concepts and Applications. (8<sup>TH</sup> edition). McGraw-Hill pub.

**Other readings will be available on reserve at the Julia Rodgers Library or as an ebook through the library web site.**

Attendance: Required for all classes and laboratory sessions. On time attendance at laboratory sessions is particularly important. Each unexcused absence from the laboratory will result in an automatic 5% reduction of the laboratory portion of the course grade. Most **Lab** sections will be held in **Hoffberger G37**.

Grades: Two in class mid-term exams: 30% (18% and 12%)  
Final exam: 25%  
Laboratory and homework assignments: 20%  
Class discussion: 15%  
Class presentation: 10%

Exams: There will be two in class exams and a comprehensive final exam. The lowest scoring class exam will contribute 12% of the final grade, and the highest will contribute 18%. Exams may be rescheduled only for valid reasons and must be discussed with the instructor **in advance**.

Homework Assignments: There will be several short problem sets and exercises given out during the semester. These assignments are designed to reinforce ideas presented in lecture and lab, and will review material for exams.

Class Discussion: Active participation is expected in all class sessions. In addition, several sessions will be dedicated to discussion of material from readings in Reilly. You are expected to carefully read the essays by Reilly, and should also draw on lecture material and general background for these discussions. Your discussion grade will be determined by the quality of your contributions including your demonstrated knowledge of genetics.

Class Presentation: Each student will give a short presentation to the class on a current event from a newspaper or magazine that touches on an issue in Genetics. Dates and details will be provided.

Blackboard: All class assignments, schedule updates, and supplemental material will be posted on the Bio 111 Blackboard site. You must check this site regularly.

**Schedule of lecture topics and labs. Please note the date of the two mid-term Exams.**

<b>Date</b>	<b>Topic</b>	<b>Place</b>
January 28	Introduction to Genetics	
January 30	Introduction to Cells and DNA	
February 4	LAB: Isolation of DNA	Hoffberger G37
February 6	Expression of Information in DNA	
February 9	Cell Division: Mitosis and Meiosis	
February 11	Transmission Genetics - plants and animals <b>Reading Set #1-Genetic Testing</b>	
February 16	Transmission Genetics – Humans	
February 18	LAB: Cell Division and Karyotype	Hoffberger G37
February 20	Inheritance of complex traits	
February 25	Mitochondrial Inheritance and other non-standard inheritance <b>Reading Set #2 – Personal Genomes</b>	
February 27	Recombinant DNA	
March 4	Movie: African American Lives: Part IV	
March 9	LAB: Transmission Inheritance	
<b>March 11</b>	<b>Exam #1</b> and, continue lab from March 9	
March 13	LAB: Conclude “Inheritance”	
<b>March 16</b>	<b>Spring Break</b>	
March 23	Population Genetics	
March 22	LAB: Population Genetics	Hoffberger 113
March 27	Recombinant DNA	

April 1	LAB: Recombinant Organisms	Hoffberger G37
April 3	Special Topics	
April 8	LAB: Crime Analysis	Hoffberger G37
April 17 -May 1	<b>Student Presentations</b>	
<b>April 22</b>	<b>Exam #2</b>	
May 6	Last Day of Class	