

INTRODUCTORY GENETICS - BIOL 3350
Spring 2017

Instructor: Dr. Janey Youngblom **Office Phone:** 667-3487
Office Hours: Tues. and Thurs . 2:15 – 3:45 **Rm: N-265**
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Required Text: Concepts of Genetics, by Klug and Cummings. 11th edition (©2015)

<u>Date-week of</u>	<u>Topic</u>	<u>Reading (chapter)</u>
January 26	An Introduction to Genetics	1
January 31	Mitosis and Meiosis	2 and p.583-584
February 7	Mendelian Genetics	3 (omit Chi Square)
February 14	Instructor-in SF on Feb 14, but class will be held Extensions of Mendelian Genetics	4
February 21	Sex Determination and Sex Chromosomes February 22 – LAST DAY TO DROP First Reflection Paper due	7
February 28	EXAM 1 - 50 pts. (Tuesday) Chromosome Mapping in Eukaryotes	5
March 7	Genetic Analysis and Mapping in Bacteria and Bacteriophages	6
March 14	Video - stem cells Chromosome Mutations	8
March 21-23	SPRING BREAK – NO CLASSES	
March 28	Quiz #1 –(Tuesday)- assigned articles and Stem Cells Special Topics Extranuclear Inheritance	(provided by instructor) 9
April 4	EXAM 2 - (Tuesday) – 50 pts DNA Structure and Analysis	10
April 11	Video – Epigenetics DNA Replication and Recombination	11
April 18	Quiz #2 –(Tuesday)- assigned articles and Epigenetics Special Topics DNA Organization in Chromosomes	674 - 683 12
April 25	Recombinant DNA technology Applications and Ethics of Genetic Engineering and Biotechnology	20 22
May 2	EXAM 3 - (Tuesday) – 50 pts. The Genetic Code and Transcription	13
May 9	Translation and Proteins Gene Mutation, DNA Repair Second Reflection Paper due	14 15
May 16	Population Evolutionary Genetics	25
May 23	FINAL EXAM (TUESDAY, 8:30-10:30) - 75 pts.	

(COMPREHENSIVE)

NOTES:

- Pre-requisites for this course are BOTY 1050, ZOOL 1050, and CHEM 1100, 1110, or equivalent.. You must have a C- or better all these classes.
- The exams will be based on lecture material, assigned chapter readings, and material covered in the Mastering Genetics homework assignments. Each exam will consist of 4 sections: multiple choice, matching or True/False, essays, and problems. **BRING SCANTRON FORM NO. 882-E for each exam, including the final.**
- **Exams** - There are a total of 4 exams; 3 midterms and one final. Each midterm exam worth 50 pts. The final exam is cumulative and worth 75 pts. The total number of points from exams is 225 pts.
- **Quizzes** - There will be two quizzes, each worth 20 points. The quizzes will be based on articles assigned by the instructor and/or specific reading assignments from the text book. The total number of points for class quizzes is 40 points.
- **Mastering Genetics** – A maximum total of 50 EQUIVALENT points can be obtained by turning in your Mastering Genetics assignments before the deadline for each assignment. **Please mark the due dates for each assignment on your calendar.** You will not be able to get any credit if you try to turn in your assignments past the due date. **However, you get ONE pass that allows you to turn in ONE of your chapter assignments up to 2 days late without any penalty.** You must notify me if you want to use this one time pass BEFORE 2 days post the deadline date for the chapter you want to have to have the deadline extension.

To register for the Mastering Genetics program, go to <http://www.masteringenetics.com> Click the “Student” button. You will need to provide your student access code. It is a printed code provided with the purchase of your new textbook and is located inside the Mastering Genetics Student Access Kit. If you purchased a used textbook, you have the option to purchase an access code online during your registration process. You do NOT need to buy access to Virtual Labs. You also have the option to purchase an electronic version of your textbook.

In Mastering Genetics, the name of the course is BIOL 3350-Spring 2017- Janey Youngblom. To register, enter the course ID: **MGENYOUNGBLOM81147**

If you encounter any technical problems while conducting your work online, click the “Support” tab located near the upper right hand corner of your page.

- **Reflection Papers** – There will be 2 reflection papers worth 5 points each, for a total of 10 points. Each paper should be 2 pages long, double spaced, 12 point font, 1” margins all around. You should write about your own personal thoughts after listening to or viewing the assigned piece.
 - 1)The first paper focuses on the new technology called CRISPR. Check Blackboard for the 2 items you need to review to write your paper.
Due date: February 21st. Email to me your paper by the start of the class period on this date. (5 pts.)
 - 2)The second paper will be based on a video you will watch towards the end of the semester titled “In the family”. The site for this video will be released later.
Due date: May 9th. Email to me your paper by the start of the class period on this date. (5 pts.)
- **The total maximum number of points from all categories (exams, quizzes, Mastering Genetics, miscellaneous) is 325 points**
- There will be no make up for missed exams or quizzes, unless you contact me before the test is given.

- This class can only be taken for a letter grade. Credit/no credit grading is NOT an option. The plus/minus grading system will be used as follows:

93.5-100%	= A
90-93%	=A-
87-89.5%	=B+
83.5-86.5%	=B
80-83%	=B-
77-79.5%	=C+
73.5-76.5	=C
70-73%	=C-
67-69.5%	=D+
63.5-66.5	=D
60-63%	=D-
<60%	=F