

## Biology 122 – Introduction to Human Genetics Spring, 2011

Instructors	Role	Office	Office Hours*	e-mail
Dr. Barbara Wilson	Instructor	65 Klamath	12:00-1:00, Tues, Thurs	barbaraw@uoregon.edu
Mike Drummond	GTF			michaeld@uoregon.edu
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\* You're welcome to visit any time you can find me. I will probably be on campus any time Tuesday and Thursday afternoons, and can be available at other times by appointment.

### Course Goals

This course is designed to familiarize you with basic principles of genetics, emphasizing human genetics, genetically caused diseases, and the relevance of genetics research and technology to society.

### Course Format

Lectures: meet PLC 180, 10:00-11:30, Tuesday and Thursday. You are *very strongly encouraged* to attend. You will gain a better understanding of class material and be better prepared for exams by actively participating in classes.

Discussions: Discussion groups meet at their assigned times in Huestis 111 on Wednesdays. Discussion groups start week 2

### Course Packets.

You will be able to purchase handouts that are slides used in lecture, bound into one notebook, from the UO Bookstore. The course packet includes mainly pictures, which can be complex. I recommend coming to lecture with the printed copies of the lecture slides, as you can take notes on them as I go over the slides in class, without having to try and write down everything on the slide.

### Textbook.

"Human Genetics" by Ricki Lewis (9<sup>th</sup> Edition) is not required but you may well find it useful. It is available in the UO Bookstore and of course you can probably find copies for sale on the internet. Eight copies are on reserve in the Science Library for 2-hour or overnight use. Relevant chapters for each lecture file are listed on the syllabus.

## **Blackboard**

Lecture notes (but not the pictures available in the course packets) will be posted on the blackboard course website. Problem sets will also be posted. Announcements will be sent to the Blackboard site. I recommend checking Blackboard frequently.

## **Grades and Tests**

**Exams.** There will be three exams, two midterms and a comprehensive final exam. Exams will cover material from lecture, problem sets, and assigned readings. Exam format will be in multiple choice or true/false format (with Scantron grading).<sup>\*</sup> Exams will test both memory of ideas presented in class and the ability to apply those ideas to new situations. The Final Exam will be cumulative and cover the entire course. Exam questions will be based entirely on lecture topics. Information from the required reading that is not covered in my lectures will not be used for exam questions. **Exams cannot be made up except in the case of a medical or family emergency that you can document.** Rescheduling the final exam is allowed **only** if you have more than three final exams on the same day. I provide number grades only for individual tests.

<sup>\*</sup> If you are unfamiliar with machine-graded scantron answer sheets, contact me before the first test and I will show you what is involved. Bring pencils with erasers to the test.

**Discussion sections and problem sets.** There will be SIX problem sets. Each will be made available on Blackboard the week before it is due. You will be required to turn in to the course Drop Box by 1:00 p.m. on Tuesday during the week when each problem set is due. The Bi122 Drop Box is located in the hallway on the ground floor of Klamath, outside of Klamath 13. As you enter Klamath from the Willamette Atrium, take the hallway to the left (Biology Office is in hallway to the right). The drop boxes (locked wooden set of drawers with slots to turn in papers) are to your left soon after you enter the left hand hallway. There will be two slots labeled for Bi122 (there also is a sign for Bi122 on top of the set of boxes); you can use either one. (If one looks full, use the other one!). In the Discussion sections, the TAs will then go over the answers to each problem. *Attendance at the Discussion sections is optional.*

**You can receive full credit for a problem set only if you turn it in by 1:00 p.m. on Tuesday.** Problem sets can be turned in late **ONLY** if you arrange to do so in advance with your TA. Problem sets, and the keys, will be posted on the course website.

**Keep every graded paper** from this class until after you receive your final grade in December. I will issue reports of the grades I have recorded twice during the term, once after the final exam and once before the final exam, so you can be sure all recorded grades are accurate.

**Clickers.** Each student must buy an iClicker and register it. Details will be available on Blackboard. Bring the clicker to each lecture. Clicker question

points will be proportional to how many questions you answer (regardless of whether your answer is correct or wrong). You'll need to register your clicker at the course Blackboard web site. You cannot make up missed clicker points, but everyone will be allowed to drop their lowest few clicker scores.

Extra credit. There is no such thing. Absolutely, positively no extra credit.

Approximate impacts different parts of the class will have on your final grade:

Clickers	5%
Problem sets	20%
1 <sup>st</sup> midterm	25%
2 <sup>nd</sup> midterm	25%
Final	25%

All of these percentages are subject to change.

Tentative standards for grades, expressed as percentages of points available, modified by weights recorded in the table above: A = 90%, B = 80%, C = 70%, D = 60%, F = < 60%. Breaks between grades may be changed at the end of class, once all grades have been recorded and the distribution of points has been evaluated. The mean score will be near the low B/high C boundary, and usually student with the top 15% for the total course points receive an A. Final grades will be curved somewhat if necessary.

### **Students with disabilities**

I want all of my students to learn the class material, so I am happy to work with students in cooperation with the office of Accessibility Services (164 Oregon Hall, telephone 346-1155, e-mail [disabsrv@uoregon.edu](mailto:disabsrv@uoregon.edu)) to remove barriers to full participation.

### **Professional conduct**

Come to class on time. Refrain from engaging in activities that distract other students, or me. Do not pack up belongings before class ends is disruptive to students and to me, so wait until I have finished lecturing before starting to leave. Do not talk with other students while someone else (instructor or classmate) is talking.

Most students here perform their class work with integrity and honor. Academic misconduct is unfair to the rest of the students. The University Student Conduct Code

(<http://uodos.uoregon.edu/LinkClick.aspx?fileticket=pULfAzFDbsg%3D&tabid=69>) defines academic misconduct

(<http://uodos.uoregon.edu/StudentConductandCommunityStandards/AcademicMisconduct/tabid/248/Default.aspx>). Please be respectful of other students and your instructors. Sometimes it can be hard to figure out the differences between plagiarism and legitimate of other people's work. This website provides some guidelines: <http://libweb.uoregon.edu/guides/plagiarism/students/>. Penalties for academic dishonesty may vary from a reduced final grade to failure in the class.

If you find yourself having troubles that interfere with your performance in class, please talk to one of the instructors as early in the term as possible. Personal crises do happen. We will try to refer you to someone to help or make special arrangements if you have done your best to deal with the situation in a timely manner.

**Important dates**

- April 3: first day of class
- April 11: last day to change to or from audit status, or add class
- April 26: **first Midterm exam**
- April 29: last day to apply to graduate spring term (undergraduates)
- May 20: last day to withdraw from class with a W
- May 20: last day to change grade options (graded vs. P/N)\*
- May 24: **second midterm exam**
- June 1-11: course evaluations open on duckweb
- June 11: **final exam at 8:00 a.m.**

\* Do NOT change to P/N if you anticipate getting a D grade. The lowest grade allowed the "P" option is a C-.

I hope you will stay in this class for the entire term. If complications in your life make it necessary to withdraw, consult the Academic Calendar to see what your deadlines are ([http://registrar.uoregon.edu/calendars/academic?field\\_schedule=Spring+2012](http://registrar.uoregon.edu/calendars/academic?field_schedule=Spring+2012)). Below is my summary:

Date	Last day to withdrawn from:	refund	grade
April 8	all classes	90%	none
April 8	some classes	100%	none
April 9	all or some classes	75%	none
April 15	all or some classes	75%	W
April 22	all or some classes	50%	W
April 29	all or some classes	25%	W
Nat 29	all or some classes	0%	W



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**Spring 2012 BI122; Introduction to Human Genetics; Schedule**

<b>DATE</b>	<b>LECTURE TOPIC</b>	<b>TEXTBOOK (optional) Chapters (pages)</b>	<b>Lecture Files &amp; Problem Sets</b>
3-Apr	Intro: Cellular basis of life	Chapters 1 (all), 2 (all)	Lecture File #1
4-Apr	DISCUSSION SECTIONS	<b>NO DISCUSSION SECTIONS during Week 1</b>	
5-Apr	Mendelian Inheritance	Chapters 3 (44-52; 57), 4 (all), 5 (all), 6 (all)	Lecture File #2
10-Apr	Mendelian Inheritance	Chapters 3, 4, 5, 6	Lecture File #2
11-Apr	DISCUSSION SECTIONS		<b>PROBLEM SET #1 DUE</b>
12-Apr	DNA and Genes	Chapters 9 (all), 10 (all)	Lecture File #3
17-Apr	DNA and Mendel: Genes and Mutations	Chapters 9, 10, 12 (all), 13 (all)	Lecture File #3
18-Apr	DISCUSSION SECTIONS		<b>PROBLEM SET #2 DUE</b>
19-Apr	DNA and Mendel: Genes and Mutations	Chapters 9, 10, 12, 13	Lecture Files #3
24-Apr	Review for Midterm #1	Chapter 11 (all)	
25-Apr	DISCUSSION SECTIONS		Midterm Exam Review
26-Apr	<b>Midterm #1</b>		
1-May	Gene Expression	Chapter 11	Lecture File #4
2-May	DISCUSSION SECTIONS		Problem Set #3 due; Midterm Exam #1 Discussion
3-May	Gene Expression		Lecture File #4
8-May	Genetic Engineering, Genomics & Stem Cells	Chapters 19 (all), 20 (all), 21, (all), 22 (all), Chapter 2 (34-38)	Lecture File #5
9-May	DISCUSSION SECTIONS		<b>PROBLEM SET #4 DUE</b>
10-May	Genetic Engineering, Genomics & Stem Cells	Chapters 19, 20, 21, 22	Lecture File #5
15-May	Genetics of Immunity	Chapter 17 (all)	Lecture File #6
16-May	DISCUSSION SECTIONS		<b>PROBLEM SET #5 DUE</b>
17-May	Genetics of Immunity	Chapter 17	Lecture File #6
22-May	Review for Midterm #2		
23-May	DISCUSSION SECTIONS		Midterm Exam review
24-May	<b>Midterm #2</b>		
29-May	Genetics of Cancer	Chapters 18 (all)	Lecture File #7
30-May	DISCUSSION SECTIONS		Problem Set #6 Due
31-May	Genetics of Cancer	Chapter 18	Lecture File #7
5-Jun	Human Population Genetic and History	Chapter 15 & 16	
6-Jun	DISCUSSION SECTIONS		Final Exam review
7-Jun	Final Exam review		Final Exam review
11-Jun	<b>FINAL EXAM</b>	<b>Monday, 8:00</b>	<b>FINAL EXAM</b>