

Principles of Genetics (BIOL 210)

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Section: 1
Lecture : T, R, F 10.00a - 10.50a TNR170
Office Hours : T, R 3.00p – 4.30p or by appointment. If I am not in my office, please check TNR458.

COURSE DESCRIPTION :

This course is intended to be an introductory level course in classical genetics with some introduction to Molecular aspects. Students will emerge with an understanding of basic genetics and an appreciation for the importance of genetics in the analysis of biological problems.

COURSE OBJECTIVES: By the end of this course you should have basic understanding of

- Transmission of genetic material
- Arrangement of Genetic material
- Changes and structure of genetic material
- Function of genetic material
- Genetic material in populations

TEXTBOOK *Genetics: Analysis and Principles* by Robert J. Brooker, 3rd edition.
Required; rental from bookstore

METHODS OF EVALUTION:

Your final grade will be based on the total number of points that you receive out of a possible 600 points.

There will be three exams (100 points each) and a final exam (200 points). Final exam will be comprehensive with more emphasis on material not covered in previous exams. There will be unannounced pop quizzes at the **beginning** of classes, consisting of 2 points each. This will be considered as an extra credit towards your final grade. There is no makeup for these quizzes. If you are late in class you will miss the quiz.

There will 100 points for the home exercises (assignments).

Break down of points needed for a Letter Grade:

First Lecture Examination = 100 points

Second Lecture Examination = 100 points

Third Lecture Examination = 100 points

Assignments = 100 points

Final Lecture Examination = 200 points

Plus there will opportunity to score extra points in pop quizzes (~30 points).

Grading Scale for the course is

555 – 600	92.5 – 100%	A
540 – 554	90 - 92.4%	A-
525 – 539	87.5 – 89.9%	B+
495 – 524	82.5 – 87.4%	B
480 – 494	80 – 82.4%	B-
450 – 479	75 – 79.9%	C+
420 – 449	70 – 74.9%	C
390 – 419	65 – 69.9%	C-
360 – 389	60 – 64.9%	D+
330 – 359	55 – 59.9%	D
< 330	< 55%	F

ATTENDANCE:

I expect you to attend each class meeting. Consistent attendance will improve your final grade more than any other investment of time that you can make. I urge you to arrive punctually, attend each lecture, take detailed notes, and to complete all assigned work.

MAKE-UP EXAMS

Make-up exams will be permitted at Instructor's discretion only for unavoidable emergencies. If you know that you will be unable to attend a scheduled exam, it is your responsibility to inform me in advance. In case of unplanned emergency, you must notify me of your absence within 48 hrs of exam and the reason for that absence. If you fail to follow this rule, I am within my rights to refuse to give you a replacement exam.

ACADEMIC INTEGRITY

Academic dishonesty in any form will result in disciplinary action in accordance with UW System Administrative Code.

Here is the link to the document that explains your rights and responsibilities as a member of the UWSP community.

<http://www.uwsp.edu/admin/stuaffairs/rights/rightsChap14.pdf>

Biol 210 Tentative Class Schedule			
Date	Day	Topic	Chapter
22-Jan-13	T	Syllabus/ Overview of Genetics	1
24-Jan-13	R	Overview of Genetics cont.	1
25-Jan-13	F	Mendelian Inheritance	2
29-Jan-13	T	Mendelian Inheritance cont..	2
31-Jan-13	R	Mendelian Inheritance cont..	2
1-Feb-13	F	Mendelian Inheritance cont..	2
5-Feb-13	T	Chromosome Transmission	3
7-Feb-13	R	Chromosome Transmission cont...	3
8-Feb-13	F	Chromosome Transmission cont...	3
12-Feb-13	T	Chromosome Transmission cont... (Review for Exam 1, TNR170, 5.00- 6.00p)	3
14-Feb-13	R	Extension of Mendelian Inheritance	4
14-Feb-13	R	Exam 1 (TNR 170, 5.00- 7.00p)	
15-Feb-13	F	Extension of Mendelian Inheritance	4
19-Feb-13	T	Extension of Mendelian Inheritance	4
21-Feb-13	R	Linkage and Mapping	5
22-Feb-13	F	Linkage and Mapping	5
26-Feb-13	T	Bacterial Genetics	6
28-Feb-13	R	Bacterial Genetics	6
1-Mar-13	F	Non-Mendelian Inheritance	7
5-Mar-13	T	Chromosome Structure and number	8
7-Mar-13	R	Structure of genetic material	9
8-Mar-13	F	Packing of genetic material	10
12-Mar-13	T	Packing of genetic material (Review for Exam 2, TNR170, 5.00- 6.00p)	10
14-Mar-13	F	Packing of genetic material	10
14-Mar-13	R	Exam 2 (TNR 170, 5.00- 7.00p)	
15-Mar-13	F	Packing of genetic material	10
19-Mar-13	T	DNA replication	11
21-Mar-13	R	DNA replication	11
22-Mar-13	F	DNA replication	11
26-Mar-13	T	Spring break	
28-Mar-13	R	Spring break	
29-Mar-13	F	Spring break	
2-Apr-13	T	Transcription	12
4-Apr-13	R	Transcription	12
5-Apr-13	F	Translation	13
9-Apr-13	T	Gene regulation (Review for Exam 3, TNR170, 5.00- 6.00p)	13
11-Apr-13	R	Gene regulation	14
11-Apr-13	R	Exam 3 (TNR 170, 5.00- 7.00p)	
12-Apr-13	F	Gene regulation	15
16-Apr-13	T	Mutation and DNA Repair	16
18-Apr-13	R	Mutation and DNA Repair	16
19-Apr-13	F	Recombination and Transposition	17
23-Apr-13	T	Recombinant DNA Technology	18
25-Apr-13	R	Biotechnology	19
26-Apr-13	F	Genomics	20
30-Apr-13	T	Genomics	21
2-May-13	R	Population Genetics	24
3-May-13	F	Population Genetics	24
7-May-13	T	Evolutionary Genetics	26
9-May-13	R	Evolutionary Genetics	26
10-May-13	F	Review	
14-May-13	T	Final Exam (10.15a - 12.15p, TNR 170)	