



**School of Arts & Science
BIOLOGY DEPARTMENT**

**BIOL 232-section
Principles of Genetics
Semester/Year, eg, 2007F or 2007Q1**

COURSE OUTLINE

The Approved Course Description is available on the web @ _____

Ω Please note: this outline will be electronically stored for five (5) years only.
It is strongly recommended students keep this outline for your records.

1. Instructor Information

(a)	Instructor:	Charles Molnar		
(b)	Office Hours:	TBA		
(c)	Location:	F 340B		
(d)	Phone:	370-3449	Alternative Phone:	
(e)	Email:	molnar@camosun.bc.ca		
(f)	Website:			

2. Intended Learning Outcomes

(No changes are to be made to this section, unless the Approved Course Description has been forwarded through EDCO for approval.)

Upon completion of this course the student will be able to:

1. Demonstrate the basic principles of Mendelian and molecular genetics.
2. Use standard techniques of genetic analysis in laboratory experiments.
3. Apply principles of genetics to ethical issues relating to molecular genetics.
4. Define and explain basic genetics terminology.
5. Use and apply genetic principles in problem solving.

3. Required Materials

- (a) Texts Genetics Analysis and Principles. 2nd edition. McGraw Hill.
- (b) Other

4. Course Content and Schedule

The following tentative schedule is subject to change if deemed necessary by the instructor.

COURSE SCHEDULE BIOLOGY 232

Winter 2008

The schedule that follows is an attempt to outline the daily activities of the class. It is subject to change or modification as the need arises.

Week of	TEXT CH.	LECTURE AND DISCUSSION	WEEK	LAB #	LAB TOPICS
Jan.7	1 2	Course Introduction, Genetics an Introduction	1		Safety, Problem solving; Intro to term lab project: plant seeds

Jan.14	2 3	Mendelian Genetics Mitosis, Meiosis	2	1	Mitosis/Meiosis Lab Fly practice Start of Linkage lab
Jan.21	3	Chromosomal Inheritance, Sex Linkage	3	2	Modification of Mendelian Ratios, Chi squared
Jan.28	4	Extensions of Mendelian Analysis	4	4	Sordaria Lab Linkage Lab Cont.
Feb.4	5	Genetic Mapping and Linkage analysis	5	7	Field trip Cytogenetics lab At Vic general Hospital.
Feb.11	7 8	MIDTERM I Extrachromosomal inheritance Chromosomal Mutations	6		Linkage Lab Reading Break Feb 14-15
Feb.18	8	Chromosomal Mutations	7		LAB EXAM I
Feb.25	11,12, 13	Topics in DNA replication and gene expression	8	8	Complementation in Serratia and Yeast DNA sequencing visit to UVIC
Mar.3	16	Mutation	9	8	Complementation in Yeast Week 2 U.V. Mutagenesis Week 1
Mar.10	16 18	Mutation DNA technology	10	6	U.V. Mutagenesis Week 2 UVIC Genomics Trip
Mar.17	19	MIDTERM II DNA technology	11		BC Cancer Agency trip Student Presentations
Mar.24	20	Genomics	12	9 10	Genomics-Computer lab Student presentations
Mar. 31	23	Genes and Development	13	9	Proteomics lab trip
Apr. 7	25	Population Genetics	14		LAB exam 2

5. Basis of Student Assessment (Weighting)

Mark Distribution: (Tentative)

LECTURE

Midterm Exam 1	10%
Midterm Exam 2	10%
Final Exam	25%
Scrapbook	5%
Assignments/Quizzes/Lab assign.	10 %

60%

LABORATORY

Midterm test	10%
Second test	10%
Term Lab Project/Presentation	<u>20%</u>
	40%

6. Grading System

Standard Grading System (GPA)

Percentage	Grade	Description	Grade Point Equivalency
90-100	A+		9
85-89	A		8

80-84	A-		7
77-79	B+		6
73-76	B		5
70-72	B-		4
65-69	C+		3
60-64	C		2
50-59	D	Minimum level of achievement for which credit is granted; a course with a "D" grade cannot be used as a prerequisite.	1
0-49	F	Minimum level has not been achieved.	0

Temporary Grades

Temporary grades are assigned for specific circumstances and will convert to a final grade according to the grading scheme being used in the course. See Grading Policy E-1.5 at camosun.ca for information on conversion to final grades, and for additional information on student record and transcript notations.

Temporary Grade	Description
I	<i>Incomplete:</i> A temporary grade assigned when the requirements of a course have not yet been completed due to hardship or extenuating circumstances, such as illness or death in the family.
IP	<i>In progress:</i> A temporary grade assigned for courses that, due to design may require a further enrollment in the same course. No more than two IP grades will be assigned for the same course. (For these courses a final grade will be assigned to either the 3 rd course attempt or at the point of course completion.)
CW	<i>Compulsory Withdrawal:</i> A temporary grade assigned by a Dean when an instructor, after documenting the prescriptive strategies applied and consulting with peers, deems that a student is unsafe to self or others and must be removed from the lab, practicum, worksite, or field placement.

7. Recommended Materials or Services to Assist Students to Succeed Throughout the Course

LEARNING SUPPORT AND SERVICES FOR STUDENTS

There are a variety of services available for students to assist them throughout their learning. This information is available in the College calendar, at Student Services or the College web site at camosun.ca.

STUDENT CONDUCT POLICY

There is a Student Conduct Policy **which includes plagiarism**. It is the student's responsibility to become familiar with the content of this policy. The policy is available in each School Administration Office, at Student Services and on the College web site in the Policy Section.

ADDITIONAL COMMENTS AS APPROPRIATE OR AS REQUIRED