

Dept. of Science  
Grande Prairie Regional College

BI 1050  
The Organization & Diversity of Life

Course Outline  
Fall 2010-2011

Instructor

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Description: A study of biological concepts and mechanisms illustrated by current examples of medical and environmental importance.

Schedule: Tuesdays & Thursdays 1130-1250 J201

Transfer: BIOL 204 – Athabasca University  
BIOL 1xx – Augustana University  
BIOL 1xx – University of Alberta  
BIOL 205 – University of Calgary  
BIOL 205 – Medicine Hat College  
BIOL 2205 – Mount Royal College  
BIOL 205 – Saint Mary's College

**NOTE 1:** BI 1050 is not accepted for credit to students whose Major or Minor is in the Biological Sciences at University of Alberta, University of Calgary or Augustana University.

**NOTE 2:** BI 1050 is not acceptable as a pre-requisite for any second year course in the Biological Sciences at Grande Prairie Regional College.

Pre-requisites: None

Textbook: "Essential Biology" (4<sup>th</sup> Edition, 2010)  
N.A. Campbell, J.B. Reece & E.J. Simon  
Pearson / Benjamin Cummings Publishers

Materials: The following items are available as downloadable files (pdf) on the BI 1050 Moodle page:

Course Outline  
Powerpoint slides used in class  
Topic Objectives  
Glossary of Terminology  
Practice quizzes/exams

**Student Responsibilities:** Since participation in lectures, and completion of assignments are important components of this course, regular attendance in class is strongly advised. Students who chose not to attend or complete assignments must assumed the risks involved. In this regard, your attention is directed to the Academic Guidelines of Grande Prairie Regional College as described in the Calendar, especially the sections dealing with plagiarism, cheating and the resultant penalties since these are serious issues and will be dealt with severely.

Evaluation:	Exam 1	33.3%
	Exam 2	33.3%
	Exam 3	33.3%
	Exam 4	33.3%

All exams will be NON-CUMULATIVE and held during scheduled class times. Final grade will be calculated from the three highest exam marks, based approximately on the following chart.

<u>Grade</u>	<u>Final Mark</u>
A+	>90%
A	87-90%
A-	83-86%
B+	79-82%
B	74-78%
B-	70-73%
C+	69-74%
C	65-68%
C-	61-64%
D+	55-60%
D	50-55%
F	<50%

## TOPIC OUTLINE

<u>TOPIC</u>	Textbook readings	
	3 <sup>rd</sup> Edition	4 <sup>th</sup> Edition
Introduction to BI 1050		
The Scientific Method	1-5, 13-18	1-6, 14-20
Chemistry and Biological Molecules	22-27, 36-51	22-28, 37-53, 7-8
Cell Structure	55-69, 80-84	54-73, 83-87
<b>EXAM I</b>		
Introduction to Metabolism	73-79	75-82
Respiration and Fermentation	88-100	90-105
Photosynthesis	103-112, 114-116	106-118
Cell Division and Reproduction	120-139	120-143
<b>EXAM II</b>		
Structure and Function of DNA	172-189	7-8, 123-125, 172-187
Viruses and Prokaryotes	189-195, 303-309	188-194, 299-305
Biotechnology	208-211, 219-230, 235-238	218-227, 234-240, 207-210
<b>EXAM III</b>		
Classification and Taxonomy	6-8, 286-291	285-291
Protists	303-315	306-313
Plants and Fungi	320-339	314-335
Animals	343-366	336-362
<b>EXAM IV</b>		

To improve understanding of the material covered during classes and to ensure successful completion of this course, it is strongly suggested that students read the relevant text pages in advance of the classes.

Students are encouraged to ask questions at any time during classes