## Dept. of Science Grande Prairie Regional College

## BI 1050 The Organization & Diversity of Life

Course Outline Fall 2009-2010

## Instructor

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Description: A study of biological concepts and mechanisms illustrated by current examples of

medical and environmental importance.

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" (3<sup>rd</sup> Edition, 2007)

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

Blackboard page:

Course Outline

Powerpoint slide used in class

**Topic Objectives** 

Glossary of Terminology

Evaluation: Quizzes 25%

Exam 1 25% Exam 2 25% Exam 3 25%

Quizzes will be assigned after each Topic and available on Blackboard. Students will have 1 week to complete each quiz. There will be approximately 9 quizzes in total, but only the six best mark will be used to determine the overall mark.

The three exams will be NON-CUMULATIVE. Exams 1 and 2 will be scheduled after approximately 4 weeks and 8 weeks of classes. Exam 3 will be scheduled during the Final Exam period.

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.

TOPIC OUTLINE	
topic	Text pages
Introduction to BI 1050	
The Scientific Method	1-5, 13-18
Chemistry and Biological Molecules	22-27, 36-51
Cell Structure	55-69, 80-84
Introduction to Metabolism	73-79
Respiration and Fermentation	88-100
Photosynthesis	103-112, 114-116
Cell Division and Reproduction	120-139
Structure and Function of DNA	172-189
Biotechnology	208-211, 219-230, 235-238
Classification and Taxonomy	6-8, 286-291
Viruses, viroids and prions	189-195
Procaryotes and Protists	303-315
Plants and Fungi	320-339
Animals	343-366

To improve understanding of the material covered during classes, it is suggested that students read the relevant text pages in advance of the classes.