

DEPARTMENT OF SCIENCE

COURSE OUTLINE – FALL 2012 BI1050 A2 – THE ORGANIZATION AND DIVERSITY OF LIFE

INSTRUCTOR:	Dr. Shauna Henley, PHONE:		539-2439
	PhD		
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OFFICE HOURS: Wednesday 12:45-2:15; Friday 9:30-11:00

PREREQUISITE(S)/COREQUISITE: None

REQUIRED TEXT/RESOURCE MATERIALS:

"Campbell Essential Biology" by Simon, Reece and Dickey, Benjamin Cummings Publishing, 5th edition, 2012 (or 4th edition, 2010).

CALENDAR DESCRIPTION:

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

CREDIT/CONTACT HOURS: 3 Credits (3-0-0) UT, 45 hours

DELIVERY MODE(S):

Lectures – Tuesdays and Thursdays 11:30 – 12:50 Rm J201

OBJECTIVES:

Students will gain an understanding of basic biological concepts with a focus on cell biology, genetics, evolution and diversity.

TRANSFERABILITY: University of Alberta University of Calgary University of Lethbridge Athabasca University Augustana Faculty, University of Alberta

* BI1050 is not accepted for credit to students whose major or minor is in the Biological Sciences at the University of Alberta, University of Calgary or Augustana University.

****** Grade of D or D+ may not be acceptable for transfer to other post-secondary institutions. Students are cautioned that it is their responsibility to contact the receiving institutions to ensure transferability.

EVALUATIONS: Quizzes - 20%

Exam 1 – 20% Exam 2 – 20% Exam 3 – 20% Exam 4 – 20%

All exams are non-cumulative. The dates of quizzes and exams will be announced in class.

STUDENT RESPONSIBILITIES: Students are expected to attend <u>all</u> classes, complete the assigned readings and write all quizzes and exams. Failure to write a quiz or exam will result in a grade of zero unless appropriate documentation is provided.

GRADING CRITERIA:

GRANDE PRAIRIE REGIONAL COLLEGE					
GRADING CONVERSION CHART					
Alpha Grade	4-point	Percentage	Designation		
	Equivalent	Guidelines	Designation		
A ⁺	4.0	90 – 100	EXCELLENT		
A	4.0	85 – 89			
A	3.7	80 - 84	FIRST CLASS STANDING		
B⁺	3.3	77 – 79	FIRST CLASS STAINDING		
В	3.0	73 – 76	GOOD		
B	2.7	70 – 72	GOOD		
C⁺	2.3	67 – 69			
С	2.0	63 - 66	SATISFACTORY		
C [−]	1.7	60 - 62			
D ⁺	1.3	55 – 59	MINIMAL PASS		
D	1.0	50 – 54	IVIINIIVIAL PASS		
F	0.0	0 – 49	FAIL		
WF	0.0	0	FAIL, withdrawal after the deadline		

STATEMENT ON PLAGIARISM AND CHEATING:

Refer to the Student Conduct section of the College Admission Guide at http://www.gprc.ab.ca/programs/calendar/ or the College Policy on Student Misconduct: Plagiarism and Cheating at www.gprc.ab.ca/programs/calendar/ or the College Policy on Student Misconduct: Plagiarism and Cheating at www.gprc.ab.ca/programs/calendar/ or the College Policy on Student Misconduct: Plagiarism and Cheating at www.gprc.ab.ca/about/administration/policies/.

**Note: all Academic and Administrative policies are available on the same page.

COURSE SCHEDULE:

	Topics	Required Text Readings (pages)
1.	Introduction to BI 1050	
2.	Introduction & the scientific method	1-20
3.	Chemistry and Biological Molecules	22-28, 37-53
4.	Classification and Taxonomy	285-291
	EXAM 1	
5.	Cell Structure	54-73, 83-89
6.	Introduction to Metabolism	75-82
7.	Respiration and Fermentation	90-105
8.	Photosynthesis	106-118
	EXAM 2	
9.	Cell Division and Reproduction	120-143
10.	Patterns of Inheritance	144-162, 165-171
11.	Structure and Function of DNA	172-187
12.	Biotechnology	207-210, 218-227,
		234-237
	EXAM 3	
12.	Evolution: how populations evolve	242-267
13.	Evolution: how biological diversity ev	volves 268-285
15.	Viruses and prokaryotes	188-194, 299-305
16.	Protists	306-313
17.	Plants and Fungi	314-335
18.	Animals	336-362
	EXAM 4	