

DEPARTMENT OF SCIENCE

COURSE OUTLINE – Winter 2013-14 BI 1080 – AN INTRODUCTION TO BIOLOGICAL DIVERSITY

INSTRUCTOR: Philip Johnson **PHONE:** 780-539-2863

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OFFICE HOURS: Mondays 1000-1120 & 1300-1420 hrs

Tuesdays 1130-1250 hrs Thursdays 1130-1250 hrs

PREREQUISITE(S)/COREQUISITE: Biology 30

REQUIRED TEXT/RESOURCE MATERIALS:

"Biology" by Campbell *et al* (9th Ed, 2011 or 8th Ed. 2008) Benjamin Cummings Publishing

"Biology on the Cutting Edge" edited by Gillies & Hewitt (2011 Pearson Publishing

Biology 1070 Laboratory Manual 2011/12, University of Alberta

CALENDAR DESCRIPTION: This course examines the major lineages of life on Earth. It provides an overview of evolutionary principles and classification, the history of life, and the key adaptations of prokaryotes, protists, fungi, plants and animals. Laboratories survey the diversity of biological form and function, and introduce students to data collection and scientific writing

CREDIT/CONTACT HOURS: 3 credits (3-1-3)

DELIVERY MODE(S): Classes Tuesdays & Thursdays 0830-0950 (J201)

Labs: L1 Mondays 1430-1720 (J130) or

L2 Tuesdays 1430-1720 (J130)

Seminars: S1 Fridays 0830-0920 (J201) or

S2 Mondays 1130-1220 (J226)

OBJECTIVES: To provide the student with a thorough understanding of current

evolutionary theory; to show how the evolutionary process has

produced a wide variety of organisms both extinct and extant.

SUPPLEMENTS: Copies of the Lecture Powerpoint presentations will be available

as handouts. They can be downloaded from the BI 1080 Moodle

page. Other learning resources will be added to the page throught

the semester.

Mastering Biology Web site

Students can gain access to this resource using the Student Access

Kit provided with the text book. The Study Area of this site

provides many useful tools including animations, videos and

practice quizzes.

TRANSFERABILITY:

BIOL 108 University of Alberta

EVALUATIONS:

Lab. Work 30%
Seminar 10%
Mid-term Exam 20%
Final Exam 40%

GRADING CRITERIA:

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

^{**} 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

STUDENT RESPONSIBILITIES: All cell phones should be switched off while students are in class. Should a cell phone ring during class, the first instance will result in a warning to all students; further instances will results in the owner of the cell phone being asked to leave that day's class.

Students will be allowed to use standard non-programmable calculators in exams. All other electronic devices are prohibited and should not be brought into exams. Students found to be using a prohibited electronic device during an exam will be required to leave immediately and will receive a mark of zero for that exam.

Students should read pages pages 47-50 of the 2012-2013 G.P.R.C. Calendar, especially in regards to policies on plagiarism, cheating and the resulting penalties. These are serious issues and will be dealt with severely.

In order to succeed in Biology 1080:

- it is advisable to attend all classes and laboratory sessions, and complete all assignments in full and on time.
- students should be active participants in class discussions
- students should ask any questions that will clarify the material being presented.

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

BI 1080

TOPIC OUTLINE & TEXT READINGS WINTER 2013-2014

TOPIC	Readings (pages) (Campbell's Biology, 9 th Edititon)
Introduction to BI 1080	
Unifying themes in Biology	1-27; 328-330
Taxonomy	537-539
Protists	575-599
Plants – Colonization of Land	600-617
Plants – Seed plants	618-635
Plants – Flowering plants	801-820
Fungi	636-653
Animals - Overview	654-665
Animals – Invertebrates	666-696
Animals - Chordates	697-727
Phylogeny & Systematics	539-555
Evolution	452-468; 469-487; 488-498; 501-506; 507-510; 514-525; 529-533