

## **DEPARTMENT OF SCIENCE**

# COURSE OUTLINE – Winter 2019 BI1050 A3 – THE ORGANIZATION AND DIVERSITY OF LIFE

**INSTRUCTOR:** Beatrice Amar, Ph.D. **PHONE:** 780 5302031

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**OFFICE HOURS:** Tuesday & Thursday 9.00 – 11.00 a.m.

PREREQUISITE(S)/COREQUISITE: None

## **REQUIRED TEXT/RESOURCE MATERIALS:**

"Campbell Essential Biology" by Simon, Reece and Dickey, Pearson Publication. 7<sup>th</sup> Edition, 2018 (or 6<sup>th</sup> edition, 2016). ISBN-13: 978-0-13-476503-7

#### **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 J226

#### **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 – 10%

Exam 1 - 20%

Exam 2 - 20%

Exam 3 - 20%

Exam 4 - 30%

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		
A <sup>+</sup>	4.0	90 – 100	EXCELLENT	
Α	4.0	85 – 89		
A <sup>-</sup>	3.7	80 – 84	FIRST CLASS STANDING	
B⁺	3.3	77 – 79		
В	3.0	73 – 76	GOOD	
B <sup>-</sup>	2.7	70 – 72		
C <sup>+</sup>	2.3	67 – 69		
С	2.0	63 – 66	SATISFACTORY	
C <sup>-</sup>	1.7	60 – 62		
D <sup>+</sup>	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	

## STATEMENT ON PLAGIARISM AND CHEATING:

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

<sup>\*\*</sup>Note: all Academic and Administrative policies are available on the same page.

# **COURSE SCHEDULE:**

Topics	Required Text Readings ( 6 <sup>th</sup> Edition)
1. Introduction to BI 1050	
2. Introduction & the scientific method	2-20
3. Chemistry and Biological Molecules	22-28, 37-53
4. Classification and Taxonomy	286-291
EX	KAM 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, 165-169
11. Structure and Function of DNA	170-185
12. Biotechnology	205-208, 216-226,
	234-237
EXAM	3
13. Evolution: how populations evolve	242-267
14. Evolution: how biological diversity evolves	268-285
15. Viruses and prokaryotes	186-192, 299-306
16. Protists	307-313
17. Plants and Fungi	314-335
18. Animals	336-360
EXA	<b>AM 4</b>