



**DEPARTMENT OF ACADEMIC UPGRADING**

**COURSE OUTLINE – WINTER 2016**

**Bi0130 (A3 & B3): Biology Grade 12 Equivalent 5(5-0-1.5) HS**

**INSTRUCTOR:** Rick Scott      **PHONE:** 780-539-2953  
**OFFICE:** J121      **EMAIL:** RScott@gprc.ab.ca

**OFFICE**                      Monday, Wednesday , Thursday 10:00 – 11:00  
**HOURS:**                      or by appointment

**CALENDAR DESCRIPTION:** The concepts in this course include nervous and endocrine systems; human reproduction and development; cell division, genetics, and molecular biology; populations and community dynamics.

**PREREQUISITES:** BI0120 (Biology 20); EN0120 (English 20-1 or 20-2) or EN0130 placement; MA0110 (Math 10C) or MA0123 (Math 20-3) or MA0120 placement. See also Academic Upgrading Science Requirements.

**REQUIRED TEXT/RESOURCE MATERIALS:** Inquiry into Biology by Colbourne et.al. McGraw-Hill Ryerson. ISBN-13 978-0-07-096052-7 (This is also the text for BI0120.) You must also print the lab manual which will be available on Moodle. Please keep in mind the colleges printing policy.

**DELIVERY MODES:** Lecture and Labs plus use of Moodle and online resources.

**CREDIT/CONTACT HOURS:** 5(5-0-1.5) Five hours of lecture and 2 hours of lab per week.

Lecture: MF 08:30 – 9:50 TW 08:30- 9:20 in A210 Lab: Tuesday 8:00- 9:50 or 2:30 – 4:20 in J130

**COURSE OBJECTIVES:** This course introduces students to the curriculum of Biology 30 taught in Alberta High Schools. The objectives are to foster an appreciation for the science of biology and its applications, and to provide students with a hands on lab experience to acquire practical skills needed to study biology. The students will gain an appreciation of how biology impacts their lives. Students will gain an understanding of basic biological concepts with a focus on human nervous and endocrine systems, human reproduction and development, cell division, molecular biology and genetics, and population and community dynamics.

**LEARNING OUTCOMES:** The major learning outcomes for students successfully completing this course are to:

- explain how the nervous system controls physiological processes
- explain how the endocrine system contributes to homeostasis..
- explain how survival of the human species is ensured through reproduction
- explain how human reproduction is regulated by chemical control systems
- explain how cell differentiation and development in the human organism are regulated by a combination of genetic, endocrine and environmental factors.
- describe the processes of mitosis and meiosis
- explain the basic rules and processes associated with the transmission of genetic characteristics.
- explain classical genetics at the molecular level.
- describe a community as a composite of populations in which individuals contribute to a gene pool that can change over time
- explain the interaction of individuals in a population with one another and with members of other populations
- explain, in quantitative terms, the change in populations over time.

**TRANSFERABILITY:**

Please consult the Alberta Transfer Guide for more information

<http://alis.alberta.ca/ps/tsp/transferralberta.html>

**\*\* 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:**

Chapter/Unit Tests.....	20%	(There are 4; each worth 5%)
Lab reports and quizzes .....	20%	
Assignments.....	10%	
Midterm.....	25%	
Final.....	25%	

The Midterm covers Units 5 and 6 (Chapters 11 – 15)

The final covers Units 7 and 8 (Chapters 16 – 20)

The final Exam will be scheduled by the Registrar sometime during the period April 15 - 26.

**Note: final exams could be on Saturdays.**

Quiz dates, lab report due dates, and assignment due dates will be announced in class or lab time.

**GRADING CRITERIA:** please note that most universities will not accept your course for transfer credit **IF** your grade is less than **C-**. This means **DO NOT GET LESS THAN “C-” IF YOU ARE PLANNING TO TRANSFER TO A UNIVERSITY.**

**GRADING CRITERIA:**

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

**March 7, 2016 is the Last day to withdraw from courses in most programs with a grade of “W”.**

**COURSE SCHEDULE/TENTATIVE TIMELINE: January 5 – April 13**

Week of		Unit Test and exam dates
Jan 6	Introduction and Chapter 11 The Nervous System	
Jan 11	Chap. 11 cont. and Chapter 12 Sensory Reception	
Jan 18	Chapter 12 Sensory reception	Ch. 11, 12 Fri. Jan 22
Jan 25	Chapter 13 Hormonal Regulation of Homeostasis	
Feb 1	Chapter 13 cont. and start chapter 14	
Feb 8	Chapter 14 Reproduction and Development	Ch. 13,14 Fri. Feb 12
Feb 15	No classes this week Winter break	
Feb 22	Reproduction and Development Chapter 15	
Feb 29	Cell Division, Genetics, and Microbiology Chapter 16	Midterm Mon Feb 29
Mar 7	Cell Division, Genetics, and Microbiology Chapter 17	
Mar 14	Cell Division, Genetics, and Microbiology Chapter 18	
Mar 21	Population and Community Dynamics Chap 19	Ch. 15 – 18 Mon. Mar 21
Mar 28	Population and Community Dynamics 19 and 20	
April 4	Population and Community Dynamics Chapter 20	
April 11	Last Unit test and review. (last class April 13)	Ch.19,20 Mon Apr.11
	Final exam scheduled by Registrar	April 15 - 26

A lab schedule will be available on Moodle.

**STUDENT RESPONSIBILITIES:**

Refer to the College Policy on Student Rights and Responsibilities at [www.gprc.ab.ca/d/STUDENTRIGHTSRESPONSIBILITIES](http://www.gprc.ab.ca/d/STUDENTRIGHTSRESPONSIBILITIES)

If you are absent from a test or exam, you MUST let the instructor know (by email or voice message) on the day of the missed test that you will not be writing the test, or as soon as possible after. Also you may be asked to provide a doctor's certificate that explains your absence for that particular time. Only then will an alternate time be scheduled for you to write a different test or exam.

**Quizzes will be written in class or labs.** The dates of quizzes will be announced ahead of time. If you miss a quiz you will automatically get a zero as there is no opportunity to make up missed quizzes.

If you are late for a lab, you might not be permitted to do the lab as important safety concerns are always addressed at the beginning of each lab period. The lab is certified as a Level 2 biohazard facility and the regulations that apply will be given to you during your first lab. If you miss a lab, you will not have the opportunity for a make-up lab. **You must attend the lab to be able to turn in the lab report from a lab exercise.** You automatically receive a grade of 0 for missed lab reports.

**Circumstances of extended illness or personal issues will be considered for labs and quizzes but only if arranged for as soon as possible after an absence.**

**Attendance:**

If you miss 10 or more classes (including labs) you may be debarred from the final exam.

**Tardiness (Lateness): Come on time!**

**Cell Phone or tablet Use**

Turn them off during class time. Do not distract others.

**Labs and assignments**

These are due on the day announced in class, lab or as posted on Moodle. If you submit your assignment or lab late you may be docked 10% per day late. **A late assignment or lab will not be accepted once the assignments or labs have been returned graded to other students.**

**Tests and Exams**

Use of any electronic communication devices during Tests and Exams is not permitted.

**STATEMENT ON PLAGIARISM AND CHEATING:**

Refer to the College Student Misconduct: Academic and Non-Academic Policy at [www.gprc.ab.ca/d/STUDENTMISCONDUCT](http://www.gprc.ab.ca/d/STUDENTMISCONDUCT)

\*\*Note: all Academic and Administrative policies are available at [www.gprc.ab.ca/about/administration/policies/](http://www.gprc.ab.ca/about/administration/policies/)