



## DEPARTMENT OF ACADEMIC UPGRADING

### COURSE OUTLINE – WINTER 2014

#### BI0130A3/B3 5 (5-0-1.5) HS 95 Hours

#### Biology Grade 12 Equivalent

**INSTRUCTOR:** Sarah Koning

**PHONE:** 780-539-2876

**OFFICE:** C418

**E-MAIL:** skoning@gprc.ab.ca

**OFFICE  
HOURS:**

Office hours are Wednesdays from 12:00-2:00. Drop-ins at any time are welcome; my class schedule is on my door. I am often in my office with my door closed. Please knock. Alternately, you may email me for an appointment time that is suitable for both of us.

**PREREQUISITE(S)/COREQUISITE:** BI0120 or Science 30, EN0120 (or EN0130 placement), and MA0110 (or MA0120 placement)

**REQUIRED TEXT/RESOURCE MATERIALS:** Inquiry into Biology, McGraw-Hill Ryerson. You **must print** the lab manual (32 pages or 16 sheets). It is optional, but might find it beneficial to print the PowerPoint presentations. Please keep in mind the College's printing policy.

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

**CREDIT/CONTACT HOURS:** 5(5-0-1.5) 95 Hours

These numbers indicate the course is a five credit course. There are 5 hours of classroom instruction and 1.5 hours in the lab per week (averaged over the term) for a total of 95 hours for the term.

**Start Date:** January 7, 2014. **End Date:** April 14, 2014 (Final Exam is scheduled after this date)

**Lecture:** A3: Tuesday and Wednesday 8:30 - 9:20; Thursday and Friday 8:30 – 9:50 (Room E303)

B3: Tuesday and Wednesday 10:00 - 10:50; Thursday and Friday 10:00 – 11:50 (Room A208)

**Lab:** L1: Monday: 8:00 – 9:50 (J126)  
L2: Monday: 10:00 – 11:50 (J126)

L3: Monday: 12:30 – 2:20 (J126)

**DELIVERY MODE(S):** Lecture, Computer Aided Instruction (Moodle), and Labs.

## **OBJECTIVES:**

Detailed course objectives are found in the course syllabus that will be provided to you.

The course is divided into 4 units:

Unit 1: The Nervous and Endocrine Systems

Unit 2: Reproduction and Development

Unit 3: Cell Division, Genetics, and Molecular Biology

Unit 4: Populations and Community Dynamics

## **Learning Outcomes:**

As stated by Alberta Education, upon successful completion of this course the student will be able to

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

## **TRANSFERABILITY:**

This course is equivalent to the Alberta Learning Biology 30 curriculum, and is listed as such in the Alberta Transfer Guide. Students are cautioned that it is their responsibility to contact receiving institutions to ensure transferability.

## GRADING CRITERIA:

Unit 1 Test	10%
Unit 2 Test	5%
Unit 3 Test	10%
Unit 4 Test	5%
Quizzes	5%
Labs	15%
Midterm	25 %
Final	25%

## EXAMINATIONS:

A **midterm exam** will be written at the end of Unit 2. A **final exam** will be scheduled during the final exam time.

Electronic devices, other than simple calculators, are not allowed into tests or exams.

The following chart will be used to convert your % score to an Alpha grade.

<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>

## STUDENT RESPONSIBILITIES:

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/about/administration/policies/\\*\\*](http://www.gprc.ab.ca/about/administration/policies/**)

If you are absent from a test or exam, you **MUST let me know (by email or voice message) the day of the missed test that you will not be writing the test.** Also you might 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 the day announced in class; **no opportunity** will be provided for missed quizzes and thus a missed quiz will result in an automatic 0.

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 biohazard zone 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 automatically receive a grade of 0 for that lab.**

### Lateness:

Lateness will not be tolerated.

### Cell Phone or other Electronic Equipment Use

Sending or receiving electronic messages during class or lab time will not be tolerated.

### Labs

These are due on the day announced in class or posted on Moodle. If you are late submitting your lab you will be docked 10% per day late. A late lab will not be accepted once the lab has been returned to the students,

### Tests and Exams

Please do not use any electronic communication devices during classes, labs, or tests. Only simple calculators are allowed for the Unit 4 test and Final Exam.

## **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/about/administration/policies/\\*\\*](http://www.gprc.ab.ca/about/administration/policies/**)

The instructor reserves the right to use electronic plagiarism detection services. Although you work together in pairs in the lab, you are to write separate reports that are your own work. If you are required to give a definition, that definition will be in your own words.

Electronic devices, other than simple calculators, are not allowed into tests or exams.

## **COURSE SCHEDULE/TENTATIVE TIMELINE:**

Times are approximate.

Unit 1: 4 weeks

Unit 2: 2 weeks

Unit 3: 5 weeks

Unit 4: 2 weeks