



## DEPARTMENT OF ACADEMIC UPGRADING

### COURSE OUTLINE – FALL 2014

#### BI0120A2 5(4-0-2) HS 90 HOURS – BIOLOGY GRADE 11 EQUIVALENT

**INSTRUCTOR:** Samantha Edgar                      **PHONE:** (780) 539-2889  
**OFFICE:** C418    **E-MAIL:** sedgar@gprc.ab.ca

Monday to Thursday 10 am to 11 am or by appointment. However, if I am not in class I will probably be in my office so feel free to stop by. My

**OFFICE HOURS:** schedule will be posted on my door

**PREREQUISITE(S)/COREQUISITE:** SC0110 (Science 10); EN0110 and LL0110 (English 10-1 or 10-2) or EN0120 placement; MA0110 (Math 10C) or MA0113 (Math 10-3) or MA0120 Placement. See Also Academic Upgrading Science Requirements

**REQUIRED TEXT/RESOURCE MATERIALS:** Inquiry into Biology, McGraw-Hill Ryerson. This is also the text for BI0130. You **must** print the lab manual. Although not necessary, you will find it **extremely** beneficial to print the PowerPoint presentations. Please keep in mind the colleges printing policy.

**CALENDAR DESCRIPTION:** The major concepts in this course include human systems (digestion; respiration; circulation; immune, excretory and motor systems); energy and matter exchange in the biosphere; population change; photosynthesis and cellular respiration.

**CREDIT/CONTACT HOURS:** 5(4-0-2) 90 Hours

These numbers indicate the course is a five credit course. There are 4 hours of classroom instruction and 2 hours in the lab per week for a total of 90 hours for the term

**Start Date:** September 4, 2014 **End Date:** December 8, 2014 (the final will be after this date)

**Lecture:** TWRF 1:00 – 1:50 (E305)

**Lab:** Monday: 2:30 – 4:20 or Friday: 10:00 – 11:50 (J130)

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

**OBJECTIVES (OPTIONAL):**

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

The course is divided into 4 units:

1 – Circulatory and Respiratory Systems

2 – Digestive and Excretory Systems

3 – Ecology

4 – Photosynthesis and Cellular Respiration

**Learning Outcomes:**

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

- 1) explain the constant flow of energy through the biosphere and ecosystems
- 2) explain the cycling of matter through the biosphere
- 3) explain the balance of energy and matter exchange in the biosphere, as an open system, and explain how this maintains equilibrium.
- 4) explain that the biosphere is composed of ecosystems, each with distinctive biotic and abiotic characteristics
- 5) explain the mechanisms involved in the change of populations over time.
- 6) relate photosynthesis to storage of energy in organic compounds
- 7) explain the role of cellular respiration in releasing potential energy from organic compounds.
- 8) explain how the human digestive and respiratory systems exchange energy and matter with the environment
- 9) explain the role of the circulatory and defense systems in maintaining an internal equilibrium
- 10) explain the role of the excretory system in maintaining an internal equilibrium in humans through the exchange of energy and matter with the environment
- 11) explain the role of the motor system in the function of other body systems.

**TRANSFERABILITY:**

This course is equivalent to the Alberta Learning Biology 20 curriculum, and is listed as such in the Alberta Transfer Guide.

**\*\* 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**

**GRADING CRITERIA:**

- Unit Tests.....30%
- Quizzes.....5%
- Labs .....15%
- Assignments.....10%
- Midterm.....20%
- Final.....20%

<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>

**EVALUATIONS:**

A midterm exam will be given 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 permitted in exams.

## **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 on the day announced in class. 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 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.

### **Attendance:**

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

**Tardiness (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 and assignments**

These are due on the day announced in class or 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 assignment or lab has been returned to the students.

### **Tests and Exams**

Please do not use any electronic communication devices during classes, labs, or tests

## **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/**)

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

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

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

(Days are approximate)

Introduction: 2 days  
Unit 1: 15 days  
Unit 2: 14 days  
Unit 3: 16 days  
Unit 4: 12 days