



## DEPARTMENT OF ACADEMIC UPGRADING

### COURSE OUTLINE – WINTER 2013

#### SC0110 Science Grade 10 Biology and Chemistry Equivalent - 5 (5.5-0-1.5)

**INSTRUCTOR:** Alan Iwaskow                      **PHONE:** 780.539.2713  
BSc., BEd

**OFFICE:** C207                                      **E-MAIL:** aiwaskow@gprc.ab.ca

**OFFICE HOURS:** 1:00- 2:30pm Tuesdays and Thursdays in C207

**PREREQUISITE(S)/COREQUISITE:** Prerequisites: SC0100, EN0090 or EN0110 placement, and MA091 or MA0110 placement or permission from department

**REQUIRED TEXT/RESOURCE MATERIALS:** Addison Wesley, *Science 10*

**CALENDAR DESCRIPTION:** This course covers three of the four units in the Alberta Education Science 10 curriculum. The major biology and chemistry concepts covered include: energy and matter in chemical change, cycling of matter in living systems, and energy flow in global systems.

**CREDIT/CONTACT HOURS:** SC0110 is a 5-credit course with 7 contact hours weekly.

**DELIVERY MODE(S):** SC0110 is lecture-based and is supplemented with labs and computer-based learning.

Many resources for this course are posted on Moodle, a computer-based course management system. You may access Moodle via any computer with an Internet link. You may sign in to use the computers in A205 during the daytime or in the library during evenings and weekends.

**Session Details:** January 8, 2013 – April 29, 2013.

**Course Schedule:** Dates for tests, labs, and assignments will be announced in class and/or entered on the calendar on Moodle. It is important to attend classes regularly to find out what is happening and where, or alternatively check out the announcements in Moodle.

**OBJECTIVES (OPTIONAL):**

The SC0110 course has been designed to provide you with an introduction to the world of biology and chemistry. It incorporates learning opportunities for you in both the science and computer labs. There are several biological themes explored in this course including: scientific method; microscopy; cell structure and function; membrane structure and function; botany, energy transfer and diversity of life. There are also several chemistry themes covered including, lab safety, matter, atoms and elements, the periodic table, ionic and molecular compounds, acids and bases, and chemical equations.

<b>BIOLOGY</b>	
Unit 1: Introduction to Biology	Unit 4: The Cell as an Open System
Unit 2: Microscopy	Unit 5: The Plant as an example of a Multi-Cellular Organism
Unit 3: Cells and The Theory of Life	Unit 6: Energy and matter exchange in the biosphere
<b>CHEMISTRY</b>	
Unit 1: Introduction to Science and Chemistry	Unit 4: Ionic and Molecular Compounds
Unit 2: Matter	Unit 5: Acids and Bases
Unit 3: Atoms, Elements and the Periodic Table	Unit 6: Chemical Changes and Equations

A course syllabus, which lists all the course objectives, can be found on Moodle.

**TRANSFERABILITY:**

This course is equivalent to Alberta Science 10 Biology and Chemistry.

\*\* 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:**

<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:

Tests – 65%

### BIOLOGY:

Test 1 – Units 1 & 2 – 9%

Test 2 – Units 3 & 4 – 12%

Midterm – Units 5 & 6 – 12%

### CHEMISTRY:

Test 1 – Units 1 & 2 – 9%

Test 2 – Units 3 & 4 – 14%

Final – Units 5 & 6 – 9%

Assignments and Quizzes – 20%

Labs – 15%

The final assignment grade is calculated using raw scores.

***Your assignments and lab reports must be your own work.*** That is, I do not want to see identical sentences, diagrams etc.

## **Lab Manual and Schedule**

The lab manual is available in Moodle. Please bring a copy with you to the first lab. Labs are not held each week; however, when scheduled, they each require 2 hours. Please pay attention to announcements in terms of detailed lab schedule in Moodle and/or during lectures.

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. *Due to safety reasons, you will NOT have the opportunity for a make-up if you miss a lab, and you will automatically receive a grade of zero for that lab.* You cannot use another person's data or class data to compile a lab report.

## **STUDENT RESPONSIBILITIES:**

### **AUD Student Classroom Department Guidelines**

The Academic Upgrading Department is an adult education environment. Students are expected to show respect for each other as well as faculty and staff. They are expected to participate fully in achieving their educational goals in a timely manner.

Certain activities are disruptive and not conducive to an atmosphere of learning. In addition to the ***Student Rights and Responsibilities*** as set out in the College calendar, the following guidelines will maintain an effective learning environment for everyone. We ask the cooperation of all students in the following areas of classroom deportment.

1. Students are expected to turn off cell phones during class time or in labs.
2. Refrain from disruptive talking or socializing during class time.
3. Be respectful of others regarding food or beverages in the classroom. Clean up your eating area and dispose of garbage.
4. Recycle paper, bottles and cans in the appropriate containers.
5. Students are expected to be punctual. Arrive on time for classes and remain for the duration of scheduled classes or related activities.
6. Children are not permitted in the classrooms.

### **Attendance**

If students miss more than 15% (or 10 days) of classes per semester in any course, they may be debarred from the final exam for that course. It is the student's responsibility to notify his/her instructor of any extenuating circumstances.

### **Test/Quizzes/Assignments**

As per the College calendar, students are responsible to "write tests and final examinations at the times scheduled by the instructor or the Office of the Registrar."

Missed exams/tests/quizzes/assignments policy:

1. In order to be given the opportunity to write or submit after the due date, the student must make prior arrangements with the instructor and be given permission to write or submit at a later date. This requirement also applies to quizzes and assignments.
2. If permitted, a late exam/test/quiz/assignment will be subject to a 20% penalty
3. Once the exam/test/quiz/assignment is handed back to the class, there is no opportunity for a late write or hand-in. The student will be assigned a grade of '0'

### **Electronic Devices**

No unspecified electronic devices will be allowed in exams.

## **Success Standard**

Although 50% is considered a pass in most courses, if you wish to be successful at the next level, we strongly recommend that you have a mark of 60% or better in your pre-requisite courses.

## **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.

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

**OTHER SUPPLIES:** You will need a binder, lined paper, unlined white paper, pencil, calculator and stapler.

Many resources for this course are accessed on Moodle, a computer-based course management system. You may access Moodle via any computer with an Internet link. You may sign in to use the computers in A205 during the daytime or in the library during evenings and weekends.

## **STUDENT PRINTING POLICY:**

*"It is the responsibility of each academic department to ensure that their students are not required to print more than the amount provided by this policy. If the requirements of the program are such that additional printing cannot be avoided, it is the responsibility of the department to ensure that their students are aware of this policy, and that additional charges for printing should be expected."*

Use the following link to read the entire policy:

<http://www.gprc.ab.ca/pdf/policies/admin/StudentPrintingPolicy.pdf>