



# Grande Prairie Regional College

Department: Academic Upgrading

## COURSE OUTLINE – WINTER 2009

### Science 0110-Science Grade 10 Biology and Chemistry Equivalent 5 (5.5-0-1.5)

**Instructor** Pam Balderston

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**Office Hours** 11:30 – 1:30 Mon - Thurs

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#### **Prerequisite(s)/corequisite(s):**

Prerequisites: SC0100, EN0090 and MA0100 or permission from department

#### **Required Text/Resource Materials:**

Addison Wesley, *Science 10*. This book is also used in Physics 0110.

#### **Other supplies:**

Other supplies you will need include a binder, lined paper, unlined white paper, pencil, calculator, stapler, and lab coat.

Many resources for this course are accessed through Blackboard, a computer-based course management system. You may access Blackboard via any computer with an Internet link. If you do not have a personal computer, you may sign in to use the computers in A205 during the daytime or in the library during evenings and weekends.

#### **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.

**Delivery Mode(s):**

SC0110 is lecture-based and is supplemented with labs, and computer-based learning.

**Credit/Contact Hours:**

SC0110 is a 5-credit course.

***Session Details:***

Jan 6, 2009 – April 14, 2009.

***Course Schedule:***

Dates for tests, labs, and assignments will be announced in class and/or entered on the calendar on Blackboard.

***Lecture Schedule:*** The course is scheduled for Monday, Tuesday, Wednesday, and Friday from 10:00am – 11:20pm, and Thursday from 10:00 – 10:50. Since the course is taught in a variety of ways, the class may be meeting in one of three places on a given day:

- 1) Classroom E 305
- 2) Biology Lab J130
- 3) Computer Lab A205.

It is important to attend classes regularly to find out what is happening and where, or alternatively check out the calendar in Blackboard.

**Objectives:**

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, and energy transfer 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 equations

<b>BIOLOGY</b>	
Unit 1: Introduction to Science and 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 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, is attached.

## **Grading Criteria:**

### **Tests – 65%**

#### **BIOLOGY:**

Test 1 – Units 1 & 2 – 9%

Test 2 – Units 3 & 4 – 12%

Test 3 – Units 5 & 6 – 11.5%

#### **CHEMISTRY:**

Test 1 – Units 1 & 2 – 9.5%

Test 2 – Units 3 & 4 – 13.5%

Test 3 – Units 5 & 6 – 9.5%

### **Assignments – 20%**

### **Labs – 15%**

#### **Tests:**

Prior arrangements must be made with the instructor to write a test at a different date than specified. If you must write an exam after the exam date, you will lose 10%, unless a doctor's note is provided.

#### **Assignments and Lab Reports:**

All assignments and labs are weighted equally.

Final assignment grade is calculated using raw scores.

If you miss a lab, you will not be able to make it up, as most labs require group work. Your assignments and lab reports **must be your own work**.

That is, I do not want to see identical sentences, diagrams etc.

#### **Statement on Plagiarism and Cheating:**

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, which are your own work.

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

Grades will be assigned on the Letter Grading System.

**Academic Upgrading Department  
Grading Conversion Chart**

Alpha Grade	4-point Equivalent	Percentage Guidelines	Designation
A <sup>+</sup>	4	90 – 100	EXCELLENT
A	4	85 – 89	
A <sup>-</sup>	3.7	80 – 84	FIRST CLASS STANDING
B <sup>+</sup>	3.3	76 – 79	
B	3	73 – 75	GOOD
B <sup>-</sup>	2.7	70 – 72	
C <sup>+</sup>	2.3	67 – 69	SATISFACTORY
C	2	64 – 66	
C <sup>-</sup>	1.7	60 – 63	
D <sup>+</sup>	1.3	55 – 59	MINIMAL PASS
D	1	50 – 54	
F	0	0 – 49	FAIL

**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 department.

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.

### **Tests**

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 [if not specified in the course outline]

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. Once the exam/test/quiz/assignment has been 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.

