



DEPARTMENT OF ACADEMIC UPGRADING

COURSE OUTLINE – WINTER 2012

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: 3:00 – 4:30 Tuesday and Thursday

PREREQUISITE(S)/COREQUISITE: Prerequisites: [SC0100](#), [EN0090](#) and [MA0100](#) or permission from department

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

OTHER SUPPLIES:

You will need a binder, lined paper, unlined white paper, pencil, calculator, stapler, and lab coat.

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.

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 each week.

Session Details:

Jan 5, 2011 – April 13, 2012.

Course Schedule:

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

Lecture Schedule: The course is scheduled for Monday, Wednesday, Thursday and Friday from 10:00am – 11:20am, and Tuesday from 10:00am – 10:50am. 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 E305
- 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 Moodle.

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

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.

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| BIOLOGY | |
| 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 |
| CHEMISTRY | |
| 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.

EVALUATIONS:

Tests – 65%

CHEMISTRY:

Test 1 – Units 1 & 2 – 9%

Test 2 – Units 3 & 4 – 14%

Test 3 – Units 5 & 6 – 9%

BIOLOGY:

Test 1 – Units 1 & 2 – 9%

Test 2 – Units 3 & 4 – 12%

Test 3 – Units 5 & 6 – 12%

Assignments and Quizzes – 20%

Labs – 15%

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:

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

Test Guidelines:

Please refer to the AUD Student Prior arrangements must be made with classroom Department Guidelines below. You must inform the instructor prior to a test if to you are unable to attend. If you are allowed to write an exam after the exam date, you will lose 10%, unless a doctor’s note is provided.

Assignments, Quizzes and Lab Reports:

In-class quizzes occur at the beginning of class and cannot be made up if missed.

Final assignment and lab grades are calculated using raw scores, not percentages.

Missed tests will result in a score of zero unless the instructor is given advance notice.

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. to another student's work.

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 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:

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.

STATEMENT ON PLAGIARISM AND CHEATING:

Please refer to pages 49-50 of the College calendar regarding plagiarism, cheating and the resultant penalties. These are serious issues and will be dealt with severely.

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.

COURSE SCHEDULE/TENTATIVE TIMELINE:

A course syllabus, which lists all the course schedule and tentative timeline, can be found on Moodle.