CHEM 400 - Spring 2019 - Applications of Chemistry

Instructor: Dave Berg Office: Elliott 314 Phone: 721-7161 email: djberg@uvic.ca

ommit afeergearteren

Lectures will be held on Monday and Thursday from 1:00-2:20 pm in Cornet B143

Office hours: TBA; you can also e-mail me to make an appointment.

Website: http://web.uvic.ca/~djberg/Chem400/index.html

Objectives: This course is intended for students who have completed at *least two years of chemistry*. The course will cover aspects of the chemistry that surrounds us. Timely topics will be covered with an emphasis on how the chemistry works, and advantages and disadvantages of its application. Students will work on projects related to each of the following topics.

Topics

- 1. Energy and Pollution
- 2. Food and Agrichemicals
- 3. Materials and Personal Care Products

Course format

The course will consist of lectures, a few in-class activities and project development. The lectures will provide some background material. Most classes will have in-class activities that will be developed in groups. These activities are targeted towards the various aspects of developing the projects. Participation in class activities is mandatory.

Groups of about 5-6 students will be established at the start of the course and these groups will work together during the course. Each project will consist of several steps for which students will submit their work and receive feedback. For details see the project description documents. At the end of each project you will provide the instructor with an evaluation of the peers in your group.

The tentative deadlines for the submission of the reports are: Feb 4 - Project 1; Mar 4 - Project 2 and Apr 5 - Project 3. There will be further deadlines while each project is being developed that will be posted on the course website.

Notes

- 1. *Plagiarism*. Copying or other forms of cheating will lead to a zero grade and may have more severe penalties. You should familiarize yourself with the UVic policy on academic integrity http://web.uvic.ca/calendar2009/FACS/UnIn/UARe/PoAcI.html.
- 2. *Important deadlines*. You are required to familiarize yourself with the various Academic Year Important Dates (http://web.uvic.ca/calendar2009/GI/2AYeID.html)

Evaluation

This course has **no midterm OR final examination** but evaluation will be ongoing based on a number of components listed below. Many activities for the development of the projects will be developed during class time, but activities outside class time will also be required. Class attendance counts toward your grade and active participation in your group activities is required for you to do well in the course. This year, there will also be three short (30 minute) in-class quizzes **based on the lecture material** in response to student feedback from earlier versions of this course.

Grading components:

Project 1	15%
Peer evaluation Project 1	5%
Project 2	15%
Peer evaluation Project 2	5%
Project 3	15%
Project 3 Group Presentation	5%
Peer evaluation Project 3	5%
Quiz 1 Mon, Jan. 28	10%
Quiz 2 Mon, Mar 4	10%
Quiz 3 Thurs, Mar 28	10%
Attendance	5%