



ENVIRONMENTAL SCIENCE PROGRAM
DRAFT COURSE OUTLINE

1. Course: Environmental Science 502 – Special Problems in Environmental Management **FALL 2017/WINTER 2018**
Lecture Section(s): L01 TuTh 08:00-09:15 SB 142
Instructor(s): Dr. Ann-Lise Norman SB 133 403- 220-5405 alnorman@ucalgary.ca **Office Hours:** TBD
Teaching Assistants: Sophia Sarpong-Kumankomah SB431A sophia.sarpongekumank@ucalgary.ca
Course Site Name on D2L: ENSC 502 L01 - (Fall 2017) - Special Problems in Environmental Management
USC Specialized Programs Office EEEL 426 403-220-8600 ensc@ucalgary.ca

2. Prerequisite(s): or Corequisite: Environmental Science 401.
Open only to students in the Environmental Science program, or by consent of the Program Director.

3. Grading: The University policy on grading and related matters is described sections [F.1](#) and [F.2](#) of the online University Calendar. In determining the overall grade in the course the following weights will be used:

Lectures		
	Midterm 1 December 7 st 2017	10%
	Midterm 2 April 12 th 2018	10%
	Class Participation	10%
Assignments – individual assignment (1)		15%
Group Assignment (1)		5%
Group Project:*		
	Research Proposal	10%
	Project Report	20%
	Final Presentation	10%
	Project Poster	10%

Grading Scale							
A+	95-100%	B+	80-84%	C+	60-65%	D+	50-54%
A	90-94%	B	75-79%	C	60-64%	D	45-49%
A-	85-89%	B-	70-74%	C-	55-59%	F	< 50%

Each piece of work (assignment, participation, component of the group project, midterm test) submitted by the student or the student’s group will be assigned a percentage score. The student’s average percentage score for the various components listed above will be combined with the indicated weights to produce an overall percentage for the course, which will be used to determine the course letter grade.

Midterm exams will be marked on a numerical (percentage) basis.

*For the group work, at the end of the course, each student will give a weight to the contribution of their group members to reflect the contribution of their group members to the project. The instructors reserve the right to change this weighting in the interests of fairness.

Students seeking reappraisal of a piece of graded term work should discuss their work with the grading instructor within one week of the grade being made available. Unclaimed work will be available from the TA or grading instructor during class or at a time that is mutually available for the student and the instructor(s).

Should the writing of a midterm examination for an entire lecture section become impossible due to events beyond the control of the instructor (such as, and not exclusively consisting of; inclement weather, instructor's illness, unavailable facilities, or other "acts of fate") the midterm examination will be written in the next possible class.

4. **Missed Components of Term Work:** The regulations of the Faculty of Science pertaining to this matter are found in the Faculty of Science area of the Calendar in [Section 3.6](#). It is the student's responsibility to familiarize himself/herself with these regulations. See also [Section E.6](#) of the University Calendar. This class is an inquiry-based course that involves traditional lectures as well as group participation. Students will be responsible for all aspects of the course as detailed on D2L. It is your responsibility to ensure that you attend class. It is not the instructor's responsibility to "fill you in" on what you miss if you are absent from a class. The instructors will not answer questions that, in their opinion, are the result of nonattendance or lack of attention in class. Participation will be marked based on your contribution to classes and is subject to a penalty for talking in class. The midterm examinations will be held in class on dates to be announced. **THERE WILL BE NO MAKEUP OR DEFERRED EXAMINATIONS** under any circumstances, nor may the examinations be written early. Students unable to write the examination because of documented illness; family emergency or religious observance will have the weight shifted onto other components of the course. **Please note that the coordinator needs to be informed of any missed components within 48 hours.**
5. **Scheduled out-of-class activities:** Students are expected to be available to interact with their groups and/or conduct laboratory and/or field activities outside class time as often as needed, as determined by the project. Meetings may be held in person, via skype, or any other means the group determines is appropriate. **REGULARLY SCHEDULED CLASSES HAVE PRECEDENCE OVER ANY OUT-OF-CLASS-TIME-ACTIVITY.** If you have a clash with this out-of-class-time-activity, please inform your instructor as soon as possible so that alternative arrangements may be made for you.
6. **Course Materials:** There is no required textbook for this class. Class materials and relevant links will be provided on D2L.
7. **Examination Policy:** There will not be a final examination in this course.
8. **Writing across the curriculum statement:** In this course, the quality of the student's writing in assignments and final reports will be a factor in the evaluation of those reports. See also [Section E.2](#) of the University Calendar.
9. **Human studies statement:** students in the course may be expected to participate as researchers in human studies (e.g. questionnaires) depending on group selection and project definition. See also [Section E.5](#) of the University Calendar.
10. **Ethics Statement:** If you agree, your papers may be used for research purposes. Your responses will remain anonymous and confidential. Grouped data (no individual responses) may be used in academic presentations and publications. Participation in such research is voluntary and will not influence grades in this course. Students' signed consent forms will be withheld from instructors until after final grades are submitted. More information will be provided at the time student participation is requested.
11. **OTHER IMPORTANT INFORMATION FOR STUDENTS:**
 - (a) **Academic Misconduct:** (cheating, plagiarism, or any other form) is a very serious offence that will be dealt with rigorously in all cases. A single offence may lead to disciplinary probation or suspension or expulsion. The Faculty of Science follows a zero tolerance policy regarding dishonesty. Please read the sections of the University Calendar under [Section K](#). Student Misconduct to inform yourself of definitions, processes and penalties
 - (b) **Assembly Points:** In case of emergency during class time, be sure to FAMILIARIZE YOURSELF with the information on [assembly points](#).

- (c) **Student Accommodations:** Students needing an Accommodation because of a Disability or medical condition should contact Student Accessibility Services in accordance with the Procedure for Accommodations for Students with Disabilities available at http://www.ucalgary.ca/policies/files/policies/procedure-for-accommodations-for-students-with-disabilities_0.pdf. Students needing an Accommodation in relation to their coursework or to fulfil requirements for a graduate degree, based on a Protected Ground other than Disability, should communicate this need, preferably in writing, to the Program Director of the Environmental Science Program, Dr. Mary Reid by email at mreid@ucalgary.ca.
- (d) **Safewalk:** Campus Security will escort individuals day or night (<http://www.ucalgary.ca/security/safewalk/>). Call **220-5333** for assistance. Use any campus phone, emergency phone or the yellow phones located at most parking lot pay booths.
- (e) **Freedom of Information and Privacy:** This course is conducted in accordance with the Freedom of Information and Protection of Privacy Act (FOIPP). As one consequence, students should identify themselves on all written work by placing their name on the front page and their ID number on each subsequent page. For more information see also <http://www.ucalgary.ca/secretariat/privacy>.
- (f) **Student Union Information:** VP Academic Phone: 403 220-3911 Email: suvpaca@ucalgary.ca
SU Faculty Rep. Phone: 403 220-3913 Email: science1@su.ucalgary.ca, science2@su.ucalgary.ca, science3@su.ucalgary.ca
Student Ombuds Office: 403 220-6420 Email: ombuds@ucalgary.ca; <http://ucalgary.ca/provost/students/ombuds>
- (g) **Internet and Electronic Device Information:** You can assume that in all classes that you attend, your cell phone should be turned off unless instructed otherwise. Also, communication with other individuals, via laptop computers, Blackberries or other devices connectable to the Internet is not allowed in class time unless specifically permitted by the instructor. If you violate this policy you may be asked to leave the classroom. Repeated abuse may result in a charge of misconduct.
- (h) **Universal Student Ratings of Instruction (USRI):** At the University of Calgary, feedback provided by students through the Universal Student Ratings of Instruction (USRI) survey provides valuable information to help with evaluating instruction, enhancing learning and teaching, and selecting courses (www.ucalgary.ca/usri). Your responses make a difference - please participate in USRI Surveys.

Course Outcomes ENSC 502 F17 W18

By the end of this course, students will be able to identify, design, conduct and create professional, meaningful and relevant reports and presentations that contribute to public discourse on an environmental issue. They will develop and evaluate approaches to study one aspect of a larger environmental problem in a group setting and be capable of integrating their results and recommendations with those of others to achieve optimal and coordinated recommendations to overcome environmental challenges facing society. They will be able to describe principles related to environmental management and have an overarching view of multiple disciplinary approaches to examining a specified topic of study in addition to a broader perspective of the field of environmental science as a whole.

Groups of students will engage with mentors in inquiry-based learning including:

1. Synthesize the current knowledge on a topic and perform an effective literature review;
2. Develop the framework and logic to frame a topical research question.
3. Collect original data, or draw on existing data to support an original hypothesis;
4. Collaborate with group members to assign roles and duties, define and achieve milestones, and communicate with mentors.
5. Integrate findings with group members to communicate results professionally.
6. Interpret novel data, or a novel approach to data analysis, and analyze results in the context of the literature to derive new conclusions;
7. Produce clear and concise research reports that can be utilized by the community;
8. Present results to the community, government, and industry at an Open House.

DRAFT LECTURE SCHEDULE 2017-2018
Thanksgiving M Oct. 9
Reading Days Nov. 10-13 (11th Remembrance Day)

Fall 2017		
Date	What is Happening?	Who is Doing it?
T Sept 12	Introduction to ENSC 502 & Discussion	Norman
R Sept 14	Ecosystem Functions	Norman
T Sept 19	<i>Class Discussion</i>	ENSC 502 Class
R Sept 21	Forestry	Ralph Cartar
T Sept 26	TBD	TBD
R Sept 28	TBD	TBD
T Oct 3	TBD	TBD
R Oct 5	TBD	TBD
T Oct 10	TBD	TBD
R Oct 12	TBD	TBD
T Oct 17	<i>Student Presentations</i>	ENSC 502 Class
R Oct 19	<i>Student Presentations</i>	ENSC 502 Class
T Oct 24	TBD	TBD
R Oct 26	TBD	TBD
T Oct 31	Land Use Practices Assignment	Norman
R Nov 2	TBD	TBD
T Nov 7	<i>Project Updates - Proposals</i>	ENSC 502 Class
R Nov 9	<i>Project Updates – Proposals</i>	ENSC 502 Class
T Nov 14	TBD	TBD
R Nov 16	TBD	TBD
T Nov 21	TBD	TBD
R Nov 23	TBD	TBD
T Nov 28	TBD	TBD
R Nov 30	TBD	TBD
T Dec 5	TBD	TBD
R Dec 7	<i>First Midterm Exam</i>	

Holiday Break

Term Starts Monday Jan 9

Reading Week Feb. 18-25

April 13. Winter Term Ends

Winter 2018

T Jan 9	TBD	TBD
R Jan 11	TBD	TBD
T Jan 16	<i>Project Updates</i>	Class of ENSC 502
R Jan 18	<i>Project Updates</i>	Class of ENSC 502
T Jan 23	TBD	TBD
R Jan 25	TBD	TBD
T Jan 30	TBD	TBD
R Feb 1	TBD	TBD
T Feb 6	TBD	TBD
R Feb 8	TBD	TBD
T Feb 13	TBD	TBD
R Feb 15	TBD	TBD
T Feb 20	READING WEEK	
R Feb 22	READING WEEK	
T Feb 27	<i>Project Updates</i>	Class of ENSC 502
R Mar 1	<i>Project Updates</i>	Class of ENSC 502
T Mar 6	TBD	TBD
R Mar 8	TBD	TBD
T Mar 13	TBD	TBD
R Mar 15	Project Logistics/Open House Info	Norman
T Mar 20	TBD	TBD
R Mar 22	TBD	TBD
T Mar 27	TBD	TBD
R Mar 29	Logistics, USRIs Dixon Cup	
T Apr 3	<i>Student Presentations</i>	Class of ENSC 502
R Apr 5	<i>Student Presentations</i>	Class of ENSC 502
T Apr 10	TBD	TBD
R Apr 12	2nd Midterm Exam	
	END of Term	

Program Approval: Approved by Program Director (M. Reid)

Date: September 11, 2017

Associate Dean's Approval for
alternate final exam arrangements: Approved by the Associate Dean (N. Chibry)

Date: September 13, 2017