COURSE OUTLINE

1. Course: ENSC 502, Special Problems In Environmental Management - Fall 2020 & Winter 2021

Lecture 01: TR 08:00 - 09:15 - Online

<table>
<thead>
<tr>
<th>Instructor</th>
<th>Email</th>
<th>Phone</th>
<th>Office</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr. Aprami Jaggi</td>
<td><a href="mailto:aprami.jaggi@ucalgary.ca">aprami.jaggi@ucalgary.ca</a></td>
<td>403 891-3464</td>
<td>TBA</td>
<td>TBA</td>
</tr>
<tr>
<td>Dr Jurgen Gailer</td>
<td><a href="mailto:jgailer@ucalgary.ca">jgailer@ucalgary.ca</a></td>
<td>210-8899</td>
<td>SB 405</td>
<td>TBA</td>
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</tbody>
</table>

Online Delivery Details:

This course is being offered online in real-time via scheduled meeting times, you are required to be online at the same time.

All lectures in the fall 2020 term will be delivered on-line using zoom. If students cannot attend a particular lecture due to extenuating circumstances (e.g. they have to care of a child/relative, are in a different time zone, sickness) they will inform the instructors and will then be provided with a link to watch the recorded lecture which will expire in 3 days. After each guest lecture students are asked to formulate a question that other students should be able to answer. Each student may miss a maximum of two 2 lectures in the fall and the winter term and still get full participation marks.

Course Site:

D2L: ENSC 502 L01-(Fall 2020 - Winter 2021)-Special Problems In Environmental Management

Note: Students must use their U of C account for all course correspondence.

2. Requisites:

See section 3.5.C in the Faculty of Science section of the online Calendar.

Prerequisite(s):
Admission to the Environmental Science program.

Corequisite(s):
Prerequisite or Corequisite: Environmental Science 401.

Admission to the Environmental Science program. Environmental Science 401.

3. Grading:

The University policy on grading and related matters is described in F.1 and F.2 of the online University Calendar.

In determining the overall grade in the course the following weights will be used:

<table>
<thead>
<tr>
<th>Component(s)</th>
<th>Weighting %</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quiz I</td>
<td>2.5</td>
<td>Nov. 5</td>
</tr>
<tr>
<td>Quiz II</td>
<td>2.5</td>
<td>Dec. 8</td>
</tr>
<tr>
<td>Quiz III</td>
<td>2.5</td>
<td>Feb. 11 2021</td>
</tr>
<tr>
<td>Quiz IV</td>
<td>2.5</td>
<td>Apr. 15 2021</td>
</tr>
<tr>
<td>Participation</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Individual Assignment</td>
<td>10</td>
<td>Dec. 3</td>
</tr>
<tr>
<td>Group Rules</td>
<td>5*</td>
<td>Sept. 29</td>
</tr>
<tr>
<td>Group Assignment</td>
<td>5*</td>
<td>Oct. 8</td>
</tr>
<tr>
<td>Group Research Proposal</td>
<td>10*</td>
<td>Oct. 29</td>
</tr>
<tr>
<td>Group Project Report</td>
<td>25*</td>
<td>Apr. 15 2021</td>
</tr>
<tr>
<td>Group Poster</td>
<td>15*</td>
<td>Apr. 15 2021</td>
</tr>
<tr>
<td>Group Final Presentation</td>
<td>10*</td>
<td>Apr. 8 &amp; 13 2021</td>
</tr>
</tbody>
</table>

Each piece of work (reports, assignments, quizzes, midterm exam(s) or final examination) submitted by the
A student will be assigned a grade. The student's grade for each component 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.

The conversion between a percentage grade and letter grade is as follows.

<table>
<thead>
<tr>
<th>Minimum % Required</th>
<th>A+</th>
<th>A-</th>
<th>B+</th>
<th>B</th>
<th>B-</th>
<th>C+</th>
<th>C-</th>
<th>D+</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>95 %</td>
<td>90 %</td>
<td>85 %</td>
<td>80 %</td>
<td>75 %</td>
<td>70 %</td>
<td>65 %</td>
<td>60 %</td>
<td>55 %</td>
<td>50 %</td>
</tr>
</tbody>
</table>

Each piece of work (reports, assignments, quizzes, etc.) submitted by the student will be assigned a grade. The student's grade for each component 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. For every assignment that is received late 10% will be deducted per day.

The participation mark is associated with on-line lectures in which a guest speaker will present material that is relevant to the course theme. At the end of the class each student will submit a question (to the TA) that other students in the course should be able to answer based on the presented material.

*For the group work components, 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 peer evaluation will be conducted after the fall term and the winter term. The instructors reserve the right to change this weighting in the interests of fairness.

This course has a registrar scheduled final exam.

4. Missed Components Of Term Work:

The university has suspended the requirement for students to provide evidence for absences. Please do not attend medical clinics for medical notes or Commissioners for Oaths for statutory declarations.

In the event that a student legitimately fails to submit any online assessment on time (e.g. due to illness etc...), please contact the course coordinator, or the course instructor if this course does not have a coordinator to arrange for a re-adjustment of a submission date. Absences not reported within 48 hours will not be accommodated. If an excused absence is approved, then the percentage weight of the legitimately missed assignment could also be pro-rated among the components of the course.

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In the event that a student misses a synchronously delivered oral presentation that forms part of the attendance grade an accommodation will be made. This is intended to support students who may be in a different time zone, who need to take care of a child or relative at the time of the presentation, or due to extenuating circumstances. In such case, the student will inform the TA about which synchronously delivered oral presentation was missed, and will be provided a link to a Zoom recording. To make up the missed attendance, the student will be asked to answer a question related to the material covered in order to get full attendance marks.

5. Scheduled Out-of-Class Activities:

There are no scheduled out of class activities for this course.

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6. Course Materials:

There is no textbook for this class. Class materials and relevant links will be provided on D2L.

In order to successfully engage in their learning experiences at the University of Calgary, students taking online, remote and blended courses are required to have reliable access to the following technology:

- A computer with a supported operating system, as well as the latest security, and malware updates;
- A current and updated web browser;
- Webcam/Camera (built-in or external);
- Microphone and speaker (built-in or external), or headset with microphone;
• Current antivirus and/or firewall software enabled;
• Stable internet connection.

For more information please refer to the UofC ELearning online website.

7. Examination Policy:

No aids are allowed on tests or examinations. There will not be a final examination in this course.

Students should also read the Calendar, Section G, on Examinations.

8. Approved Mandatory And Optional Course Supplemental Fees:

There are no mandatory or optional course supplemental fees for this course.

9. Writing Across The Curriculum Statement:

For all components of the course, in any written work, the quality of the student's writing (language, spelling, grammar, presentation etc.) can be a factor in the evaluation of the work. See also Section E.2 of the University Calendar.

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10. Human Studies Statement:

Students will not participate as subjects or researchers in human studies.

See also Section E.5 of the University Calendar.

Students in this course may be expected to participate as researchers in human studies (e.g. questionnaires, interviews, etc.) depending on group selection and project definition.

11. Reappraisal Of Grades:

A student wishing a reappraisal, should first attempt to review the graded work with the Course coordinator/instructor or department offering the course. Students with sufficient academic grounds may request a reappraisal. Non-academic grounds are not relevant for grade reappraisals. Students should be aware that the grade being reappraised may be raised, lowered or remain the same. See Section I.3 of the University Calendar.

a. Term Work: The student should present their rationale as effectively and as fully as possible to the Course coordinator/instructor within ten business days of either being notified about the mark, or of the item's return to the class. If the student is not satisfied with the outcome, the student shall submit the Reappraisal of Graded Term work form to the department in which the course is offered within 2 business days of receiving the decision from the instructor. The Department will arrange for a reappraisal of the work within the next ten business days. The reappraisal will only be considered if the student provides a detailed rationale that outlines where and for what reason an error is suspected. See sections I.1 and I.2 of the University Calendar.

b. Final Exam: The student shall submit the request to Enrolment Services. See Section I.3 of the University Calendar.

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12. Other Important Information For Students:

a. Mental Health The University of Calgary recognizes the pivotal role that student mental health plays in
physical health, social connectedness and academic success, and aspires to create a caring and supportive campus community where individuals can freely talk about mental health and receive supports when needed. We encourage you to explore the mental health resources available throughout the university community, such as counselling, self-help resources, peer support or skills-building available through the SU Wellness Centre (Room 370, MacEwan Student Centre, Mental Health Services Website) and the Campus Mental Health Strategy website (Mental Health).

b. **SU Wellness Center:** For more information, see [www.ucalgary.ca/wellnesscentre](http://www.ucalgary.ca/wellnesscentre) or call 403-210-9355.

c. **Sexual Violence:** The Sexual Violence Support Advocate, Carla Bertsch, can provide confidential support and information regarding sexual violence to all members of the university community. Carla can be reached by email ([evsa@ucalgary.ca](mailto:evsa@ucalgary.ca)) or phone at [403-220-2208](tel:403-220-2208). The complete University of Calgary policy on sexual violence can be viewed at [https://www.ucalgary.ca/policies/files/policies/sexual-violence-policy.pdf](https://www.ucalgary.ca/policies/files/policies/sexual-violence-policy.pdf).

d. **Misconduct:** 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. Examples of academic misconduct may include: submitting or presenting work as if it were the student's own work when it is not; submitting or presenting work in one course which has also been submitted in another course without the instructor's permission; collaborating in whole or in part without prior agreement of the instructor; borrowing experimental values from others without the instructor's approval; falsification/fabrication of experimental values in a report. **These are only examples.**

e. **Academic Accommodation Policy:** 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 [procedure-for-accommodations-for-students-with-disabilities.pdf](file:///C:/Users/YourName/Documents/procedure-for-accommodations-for-students-with-disabilities.pdf).

Students needing an accommodation in relation to their coursework or to fulfill 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. Daniel Shugar by email daniel.shugar@ucalgary.ca or phone 403 220-5028. Religious accommodation requests relating to class, test or exam scheduling or absences must be submitted no later than **14 days** prior to the date in question. See Section E.4 of the University Calendar.

f. **Freedom of Information and Privacy:** This course is conducted in accordance with the Freedom of Information and Protection of Privacy Act (FOIPP). 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 [Legal Services](mailto:LegalServices@ucalgary.ca) website.

g. **Student Union Information:** [VP Academic](mailto:vpacademics@ucalgary.ca), Phone: 403-220-3911 Email: suvpaca@ucalgary.ca. [SU Faculty Rep.](mailto:sufacultyrep@ucalgary.ca), Phone: 403-220-3913 Email: sciencerep@su.ucalgary.ca. **Student Ombudsman**, Email: [ombuds@ucalgary.ca](mailto:ombuds@ucalgary.ca).

h. **Surveys:** At the University of Calgary, feedback through the Universal Student Ratings of Instruction ([USRI](https://www.ucalgary.ca/surveys)) survey and the Faculty of Science Teaching Feedback form provides valuable information to help with evaluating instruction, enhancing learning and teaching, and selecting courses. Your responses make a difference - please participate in these surveys.

i. **Copyright of Course Materials:** All course materials (including those posted on the course D2L site, a course website, or used in any teaching activity such as (but not limited to) examinations, quizzes, assignments, laboratory manuals, lecture slides or lecture materials and other course notes) are protected by law. These materials are for the sole use of students registered in this course and must not be redistributed. Sharing these materials with anyone else would be a breach of the terms and conditions governing student access to D2L, as well as a violation of the copyright in these materials, and may be pursued as a case of student academic or non-academic misconduct, in addition to any other remedies available at law.

Course Learning Outcomes

1. Students define the focus of their research
2. Students synthesize what is known on the topic from the literature
3. Students identify knowledge gaps and develop a research proposal to address a specific aspect of the knowledge gap
4. Students learn how to work in a team, manage the responsibilities of each team member and meet timelines
5. Students work collaboratively with mentors and/or communities to perform novel research (e.g. design research plan, decide on which methods they will use and execute the proposed research plan)
6. Students analyze data and share results during in class presentations
7. Students synthesize their findings and produce a final report and poster
8. Students present their research to a community in form of an oral presentation at an Open House

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

Electronically Approved - Aug 31 2020 16:21

Department Approval