**ENVR 200 101 Environmental Science Syllabus – 2016 Spring**

**Instructors:**  
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**Meetings:**  
Thursdays 2 – 5 PM; EOS-Main, room 135

**Website:**  
http://elearning.ubc.ca/connect/ login with your CWL, select ENVR 200.  
*Make it a habit to check the Connect site regularly!*

**TEXTBOOK (mandatory)**  
The Pearson Custom Library for *Environmental Science (UBC custom version of ENVIRONMENT: The science behind the stories (J. Withgott, S. Brennan and B. Murck), Canadian Second Edition.)* You may also use a new or used copy of the original textbook.

**INTRODUCTION**  
ENVR 200 is an introduction to global, regional, and local environmental issues. Because investigation (research) into these issues demands a multi-disciplinary approach, in this course, we will consider a variety of perspectives: scientific, technical, social, political, economic, legal, and ethical. Unlike topics taught in most introductory classes, the field of Environmental Science is so broad that it is likely different students will leave the course with different knowledge sets. We hope that all students will leave the course with at least an appreciation of a common set of knowledge and research skills.

**Learning Goals:**  
By the end of this course, students should be able to:  

**Basic scholarly skills:**
- Iteratively monitor and improve your own process of learning  
- Find information regarding environmental science topics from a variety of media types (internet articles, position papers, research reports, journal articles)  
- Evaluate whether or not information is relevant and useful, and any potential biases  
- Read scientific papers for key concepts, and to identify the basis for the authors’ conclusions in the data and analysis  
- Synthesize environmental information from a variety of sources and viewpoints  
- Formulate and ask relevant questions

**Communication skills:**
- Communicate a coherent synthesis of a topic in environmental science, both orally and in writing  
- Defend a position, on an environmental issue, that is not necessarily your own viewpoint

**Group Work skills:**
- Effectively contribute to group projects  
- Evaluate the work of other groups, using detailed rubrics  
- Evaluate the work of other individuals

**Content:**
- Understand at least three areas of environmental science at some depth, including social relevance (e.g. climate change, air pollution, waste disposal, biodiversity, etc.).
CLASS ACTIVITIES
(See Weekly Activities Pages in CONNECT for details of each week’s activities and expected preparation)

To foster the above skills and gather the accompanying knowledge, ENVR 200 includes a variety of in-class and out-of-class activities. We use various activities that require discussion, both with experts and with other students, through which you will enlarge your understanding of the complexity of environmental issues. A significant amount of group work is required, both inside and outside of class. The ability to work within a team is one of the key skills in learning and in life in general. For group work outside class, the key is to start assignments early. Coordinating meetings and exchanging information and drafts of reports takes time. **It is impossible to do these group assignments the night before class.**

Other key skills that this program is trying to help you develop are the abilities to listen carefully and to ask insightful, constructive questions. You can gain this skill through active participation in class. We realize it will not be possible for each student to participate equally in every class but we expect you to be actively engaged in asking questions and making comments. This arrangement does require more attention and energy on your part than "taking notes”.

Homework Activities (“Class Prep”):
Most weeks you will be assigned a homework activity, which is due BEFORE the class period starts. For the homework assignments we suggest that you write (and save!) your answers in your own document, then copy and paste into the assignment submission box on Connect. **Please use plain text (no formatting) for assignments that you paste into the submission box, otherwise your submission will be gobbledegook.** Larger assignments may require you to upload a file if formatting is of concern (as it will not come through with copy and paste). **All assignments must be submitted electronically on Connect in order to be marked. These assignments will not be accepted late (once class has begun).**

Learning Portfolio and Journal: You will assemble a portfolio that highlights and documents your achievements during this term. Your portfolio will contain a learning plan, five examples of your work in the term, one writing assignment and your weekly journal. Your portfolio will be compiled at the end of the term and organized into a presentable format. **All Journal submissions must be submitted electronically on Connect in order to be marked.**

Guest Speakers:
One of the functions of the course is to engage students with information and ideas presented by people with experience (often called experts) in a particular area. These people will present in our class, during which there will be time for discussions. Each of the invited speakers will present a specific point of view on a given issue. One of our key expectations is that you begin to analyze information you hear/read/view. The mechanism for doing this is to formulate questions about what you hear/read/view. As preparation to interact with guest speakers, there may be reading and written assignments that are due in advance. **Check the rubric for homework activities on CONNECT regarding expectations.** Since you will only see this person once, taking full advantage of the class means you need to come to class prepared to discuss your homework activity and ask questions of the guest speaker. We expect you to be fully engaged during class and may assign follow-up activities related to what was discussed in class.

Poster Sessions:
There will be 3 poster sessions. You will present a poster in two out of the three sessions, and you are expected to review posters in all sessions. **Check CONNECT for your personal assignments, and for details regarding poster preparation and expectations.** You will earn marks for both posters and reviews.
Environmental Assessments:
There will be 3 mock Environmental Assessments. You will be a Panelist in 1 out of the 3 sessions; you will be an Adjudicator in the other 2 sessions. When you are panelist, you will be role-playing and representing a particular viewpoint, one which is not necessarily similar to your own. Check CONNECT for your personal assignments, and for details regarding preparation for adjudicators, preparation of position papers, opening statements, and recommendations.

Research Project:
You will complete an individual research project regarding an environmental issue of your choice (subject to our approval). You will write a "review" paper about the issue and orally present your paper in a formal setting. Check CONNECT for detailed instructions about the steps you'll complete throughout the term for this research project.

Assignment Logistics
For individual assignments, there will be a penalty of 5% (of the assignment mark) for each day the assignment is late. Homework assignments (“Class Prep”) are always due before class and these are not accepted late (once class begins), i.e. the 5% penalty does not apply to these assignments! The Adjudicator Prep for Environmental Assessments also are not accepted late.

Plagiarism is considered a serious offence, and breach of UBC policies will be dealt with through formal procedures. Here is the UBC page on academic honesty:
http://www.students.ubc.ca/calendar/index.cfm?tree=3,54,111,959
Harvard has an excellent series of video tutorials about how to avoid plagiarism. If you aren’t sure what to do, or you just need a refresher, go to:
http://isites.harvard.edu/icb/icb.do?keyword=paraphrasing

Field Trips
We will organize two field trips. Note that the field trips are not optional. You are expected to attend. The field trips begin at 2:00 pm and will return to UBC by 4:50 pm.

ADVICE ON RESEARCH AND ANALYSIS
Information is a lever you can use to create change. Getting used to collecting information in a productive manner is one skill we hope to help you develop. Evaluating information across a wide variety of disciplines is often difficult. It is important to keep in mind that the information you find may not be complete, or even correct. It is essential to develop a critical sense of the kinds of information you encounter. What is the source of the information? In some cases, experts submit information to review before it is published (e.g. academic journals). In other cases (usually popular magazines, websites, blogs) material is not reviewed prior to publication. What mechanisms can we use to check the accuracy and veracity of information?
Stories in the press may be printed because they are "news" rather than “fact” (well-supported information). It might be "news" that someone said something, but what that person said may or may not be true. Someone other than the writer almost always edits news articles for space, and headlines are added separately. What effect can this have? How can you tell if the reporter got the story right? Information can also be biased. Since almost everything is too complex to tell the whole story, you will almost never find a truly complete report. What was left out? Could there be a bias in what was left out?

ON-LINE RESEARCH SKILLS
We assume you have basic on-line research skills, but we also are expecting you to do more than Google searches in this class. In addition, if you need to refresh or upgrade your skills, the UBC Library offers instruction on power searching the web, navigating the UBC Library website, and effective article searching. See http://help.library.ubc.ca/#finding for further information.
You can also ask for help at the Reference Desk in the Irving K Barber Learning Centre or contact Kevin Lindstrom, Reference Librarian Woodward Library (kevin.lindstrom@ubc.ca).

MARKING SUMMARY (subject to minor modifications)

<table>
<thead>
<tr>
<th>Assignment</th>
<th>How many?</th>
<th>Marks per</th>
<th>Total Marks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Learning Plan</td>
<td>1</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Homework Activities (&quot;Class Prep&quot;)</td>
<td>11</td>
<td>2 or 3</td>
<td>35</td>
</tr>
<tr>
<td>Journal entries</td>
<td>10</td>
<td>2</td>
<td>20</td>
</tr>
<tr>
<td>Communication writing assignment</td>
<td>1</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Posters</td>
<td>2</td>
<td>16</td>
<td>32</td>
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<tr>
<td>Peer reviews of posters</td>
<td>~12</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Environmental Assessment adjudicator prep</td>
<td>2</td>
<td>3</td>
<td>6</td>
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<tr>
<td>Environmental Assessment position paper</td>
<td>1</td>
<td>12</td>
<td>12</td>
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<tr>
<td>Environmental Impact Assessment</td>
<td>2</td>
<td>8</td>
<td>16</td>
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<tr>
<td>Recommendations</td>
<td></td>
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<tr>
<td>Quizzes</td>
<td>1</td>
<td>3</td>
<td>3</td>
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<tr>
<td>*Research paper – working title and database search</td>
<td>1</td>
<td>3</td>
<td>3</td>
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<tr>
<td>*Research paper – outline and annotated bibliography</td>
<td>1</td>
<td>5</td>
<td>5</td>
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<tr>
<td>*Version 1 of research paper</td>
<td>1</td>
<td>10</td>
<td>10</td>
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<tr>
<td>*Peer review of research paper draft</td>
<td>1</td>
<td>4</td>
<td>4</td>
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<tr>
<td>*Research paper presentation</td>
<td>1</td>
<td>8</td>
<td>8</td>
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<tr>
<td>*Peer reviews of presentations</td>
<td>4-5</td>
<td></td>
<td>1</td>
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<tr>
<td>*Final research paper</td>
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<td>40</td>
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<tr>
<td>Portfolio explanation</td>
<td>1</td>
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<tr>
<td>TOTAL</td>
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<td></td>
<td>211</td>
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</tbody>
</table>

Your final mark in the course is the total of marks obtained for each of the assignments divided by the total possible marks. **However, you must pass the Research Project in order to pass the course. Research Project assignments have a * next to them in the table above.** Class attendance is not an optional activity. In addition, participating in the field trips is required. Only legitimate excuses, such as medical reasons that are backed up with doctor’s notes, will be accepted. If you legitimately miss an activity that has marks assigned to it, there will be no "make up assignments." Instead your total possible marks will be reduced.