

| Course ID: | Course Title: | | Winter 2019 |
|------------|---------------------------------------|---------------|-------------|
| ECOL 335 | INTRODUCTION TO ENVIRONMENTAL SCIENCE | Prerequisite: | BIO213 |
| | | Credits: | 3 |

| Class Information | | Instructor Information | | Important Dates | |
|-------------------|---------------|------------------------|---|---|-------------|
| Days: | WED / FRI | Instructor: | Simina Pascut | First day of classes: | Thu, Jan 3 |
| Time: | 11.15 - 12:30 | Email: | Simina.Pascut@ambrose.edu | Last day to add/drop, or change to audit: | Sun, Jan 13 |
| Room: | A2212 | Phone: | | Last day to request revised exam: | Mon, Mar 11 |
| Lah/ | WED/ A2145 | Office: | L2091 | Last day to withdraw from course: | Fri, Mar 22 |
| Lab/ Tutorial: | 8:15-9:30 | Office Hours: | 13:00-14:00 on Fridays (after class) and anytime by appointment | Last day to apply for coursework extension: | Fri, Mar 29 |
| Final Exam: | ТВА | | | Last day of classes: | Fri, Apr 5 |

Course Description

This course will provide students with an overview of Environmental Science, including environmental testing, resource use by humans, pollution, biotechnology, conservation methods, industry standards, and environmental guidelines within Canada.

This course aims to further students' understanding of fundamentals of environmental issues, ecological interactions, and human impact on environment. A variety of environmental issues are examined, including: energy use and impacts, energy alternatives, natural resource management and sustainability, global climate change, pollution, water resources and waste management. Also part of the ecological interactions are the economic, political and sociological factors influencing resource management and environmental policy.

Expected Learning Outcomes

- 1. This course will allow students to increase their understanding of fundamental ecological principles and to apply these principles to topics associated with an introductory Environmental Science course.
- 2. Students will gain a greater appreciation for the interactions between people and the environment.
- 3. Students will gain the ability to recognize and evaluate the socioeconomic, political, and ethical issues in Environmental Science.
- 4. Students will develop an understanding of real life integrated case studies that help them have a holistic approach not only to environmental issues and impacts, but rather possible environmental solutions.

5. Students will explore contemporary issues in Environmental Science such as global climate change, sustainable agriculture, pollutants and waste management, energy use and alternate energy sources, mineral and soil resources.

Textbooks

No required textbook.

The following books are recommended:

a) Jay H Withgott, Mattew Laposata, and Barbara Murck (2017). Environment: The Science Behind the Stories, Third Canadian Edition, Pearson Canada

b) Dearden, P & B Mitchell (2016). Environment Change & Challenge, Fifth Edition. Toronto: Oxford University Press

Course Schedule

The following schedule provides a general guideline and timetable for topics and tests. It may change depending on the progress through the semester.

I. Fundamentals of Environmental Science (Weeks 1-6)

Introduction to Environmental Science/Syllabus/Course Outline Interdisciplinary approach to Environment/Environmentalism/Environmental Justice Earth's natural resources/ Resource Management Human Activities/Population Growth Earth's carrying capacity/Global distribution Ecological footprint/Biocapacity Models of sustainability Environmental systems/earth's major subsystems Ecosystems / Matter cycling / Geographic information system Nutrient cycles/ Carbon & Nitrogen & Phosphorus cycles

Midterm Test (20%) will be in Week 07 (Friday, February 15th)

II. Current Environmental Issues/Impacts/Solutions (Week 8-14)

Atmospheric Science/ Air pollution Global climate chance Fossil Fuels: Energy use, impacts/alternatives Conservation of Species and Habitats Forests and Forest Management GMO's / Sustainable Agriculture Fresh water systems and water resources Managing waste Potential Field trip: The City of Calgary's waste-water treatment plant Student Research project presentations **Final Test (30%) will be in Week 15 – date to be announced**

Requirements:

All course material work, presentation, articles and laboratory assignments will be uploaded to Moodle.

Laboratory Assignments, Tests and Exams, Student Research Project Presentations:

All exams and assignments are announced and/or schedule in advance. Laboratory assignments are due at the designated time announced in class. The laboratory assignments can be submitted by paper or uploaded to Moodle.

Late assignments will be deducted as 10% per day (calendar days include both weekdays and weekends). No assignments will be accepted after 3 days.

Written exams are objective, utilizing a variety of formats including multiple-choice, matching, true/false, completion, short answer and short essay questions.

The final exam will have a structure similar to the written midterm, with a combination of question formats. Approximately, 60% of final exam will cover material since the term test. Approximately 40% of the exam will consist of cumulative material. Further details regarding this comprehensive material will be forthcoming.

Attendance:

Regular attendance will be essential for success on all exams and assignments. If you know you are not going to be in the class, please let me know by e-mail.

| Grade Summary: | |
|--------------------------|------------------|
| <u>Activity</u> | Percent of Grade |
| Midterm Test | 20 |
| Laboratory Assignments | 30 |
| Student Research project | 20 |
| Final Test | 30 |

The available letters for course grades are as follows:

| Letter Grade | Percentage (%) | Description |
|--------------|----------------|--------------|
| A+ | 95-100 | Outstanding |
| А | 90-95 | Excellent |
| A- | 85-90 | Very good |
| B+ | 80-85 | Good |
| В | 75-80 | Good |
| В- | 70-75 | Good |
| C+ | 65-70 | Satisfactory |
| С | 60-65 | Satisfactory |
| C- | 55-60 | Poor |
| D+ | 50-55 | Poor |
| D | 50 | Minimal Pass |
| F | Below 50 | Fail |

Because of the nature of the Alpha 4.00 system, there can be no uniform University-wide conversion scale. The relationship between raw scores (e.g. percentages) and the resultant letter grade will depend on the nature of the course and the instructor's assessment of the level of each class, compared to similar classes taught previously.

Please note that final grades will be available on student registration system. Printed grade sheets are not mailed out.

Other:

150 Ambrose Circle SW, Calgary, AB T3H 0L5 **T** 403-410-2000 **TF** 800-461-1222 info@ambrose.edu **ambrose.edu**

Ambrose University Academic Policies:

Communication

All students have received an Ambrose e-mail account upon registration. It is the student's responsibility to check this account regularly as the Ambrose email system will be the professor's instrument for notifying students of important matters (cancelled class sessions, extensions, requested appointments, etc.) between class sessions. If students do not wish to use their Ambrose accounts, they will need to forward all messages from the Ambrose account to another personal account.

Registration

During the **Registration Revision Period** students may enter a course without permission, change the designation of any class from credit to audit and /or voluntary withdraw from a course without financial or academic penalty or record. Courses should be added or dropped on the student portal by the deadline date; please consult the List of Important Dates. After that date, the original status remains and the student is responsible for related fees.

Students intending to withdraw from a course after the Registration Revision Period must apply to the Office of the Registrar by submitting a "Request to Withdraw from a Course" form or by sending an email to the Registrar's Office by the **Withdrawal Deadline**; please consult the List of Important Dates on the my.ambrose.edu website. Students will not receive a tuition refund for courses from which they withdraw after the Registration Revision period. A grade of "W" will appear on their transcript.

Students wishing to withdraw from a course, but who fail to do so by the applicable date, will receive the grade earned in accordance with the course syllabus. A student obliged to withdraw from a course after the Withdrawal Deadline because of health or other reasons may apply to the Registrar for special consideration.

Exam Scheduling

Students, who find a conflict in their exam schedule must submit a Revised Examination Request form to the Registrar's Office by the deadline date; please consult the List of Important Dates. Requests will be considered for the following reasons only: 1) the scheduled final examination slot conflicts with another exam; 2) the student has three final exams within three consecutive exam time blocks; 3) the scheduled final exam slot conflicts with an exam at another institution; 4) extenuating circumstances. Travel is not considered a valid excuse for re-scheduling or missing a final exam.

Electronic Etiquette

Students are expected to treat their instructor, guest speakers, and fellow students with respect. It is disruptive to the learning goals of a course or seminar and disrespectful to fellow students and the instructor to use electronics for purposes unrelated to the course during a class session. Turn off all cell phones and other electronic devices during class. Laptops should be used for class-related purposes only. Do not use iPods, MP3 players, or headphones. Do not text, read, or send personal emails, go on Facebook or other social networks, search the internet, or play computer games during class. Some professors will not allow the use of any electronic devises in class. The professor has the right to disallow the student

to use a laptop in future lectures and/or to ask a student to withdraw from the session if s/he does not comply with this policy. Repeat offenders will be directed to the Dean. If you are expecting communication due to an emergency, please speak with the professor before the class begins.

Academic Policies

It is the responsibility of all students to become familiar with and adhere to academic policies as stated in the Academic Calendar. Personal information (information about an individual that may be used to identify that individual) may be required as part of taking this class. Any information collected will only be used and disclosed for the purpose for which the collection was intended. For further information contact the Privacy Compliance Officer at privacy@ambrose.edu.

Extensions

Although extensions to coursework in the semester are at the discretion of the instructor, students may not turn in coursework for evaluation after the last day of the scheduled final examination period unless they have received permission for a course Extension from the Registrar's Office. Requests for course extensions or alternative examination time must be submitted to the Registrar's Office by the deadline date; please consult the List of Important Dates. Course extensions are only granted for serious issues that arise "due to circumstances beyond the student's control."

Appeal of Grade

An appeal for change of grade on any course work must be made to the course instructor within one week of receiving notification of the grade. An appeal for change of final grade must be submitted to the Registrar's Office in writing and providing the basis for appeal within 30 days of receiving notification of the final grade, providing the basis for appeal. A review fee of \$50.00 must accompany the appeal. If the appeal is sustained, the fee will be refunded.

Academic Integrity

We are committed to fostering personal integrity and will not overlook breaches of integrity such as plagiarism and cheating. Academic dishonesty is taken seriously at Ambrose University as it undermines our academic standards and affects the integrity of each member of our learning community. Any attempt to obtain credit for academic work through fraudulent, deceptive, or dishonest means is academic dishonesty. Plagiarism involves presenting someone else's ideas, words, or work as one's own. Plagiarism is fraud and theft, but plagiarism can also occur by accident when a student fails or forgets to acknowledge to another person's ideas or words. Plagiarism and cheating can result in a failing grade for an assignment, for the course, or immediate dismissal from the university. Students are expected to be familiar with the policies in the current Academic Calendar that deal with plagiarism, cheating, and the penalties and procedures for dealing with these matters. All cases of academic dishonesty are reported to the Academic Dean and become part of the student's permanent record.

Note: Students are strongly advised to retain this syllabus for their records.

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