

Semester: Fall 2016

Course ID: ECOL 335

Credits: 3

Course Name: INTRODUCTION TO ENVIRONMENTAL SCIENCE

**Prerequisites:** 

Class Information		Instructor Information		First day of classes:	Wed., Sept. 7, 2016	
Days:	TU / THU	Instructor:	Graeme Gissing	Last day to add/drop, or change to audit:	Sun., Sept 18, 2016	
Time:	9:45-11:00	Email:	ggissing@ambrose.edu	Last day to request revised exam:	Mon., Oct. 24, 2016	
Room:	A2141	Phone:	403-410-2000 x 5940	Last day to withdraw from course:	Mon., Nov. 14, 2016	
Lab:	Not applicable	Office:	G2204	Last day to apply for time extension for coursework:	Mon., Nov 21, 2016	
FINAL EXAM:  Date: Wed Dec 21, 2016  Time: 9:00 AM  Room: A2133		Office Hours:	11:30 - 12:30 on Thursdays (after class) and anytime by appointment	Last day of classes:	Mon., Dec 12, 2016	

Textbook: No required textbook

The text that will most closely reflect course content:

Jay H Withgott, Matthew Laposata, and Barbara Murck. *Environment: The Science Behind the Stories*, Third Canadian Edition, Pearson Canada

# **Course Description:**

This course introduces students to the key concepts in Environmental Science. This course aims to further students' understanding of environmental issues, ecological interactions, and human impact on the environment. A variety of environmental issues are examined, including: energy use and impacts, energy alternatives, natural resource management and sustainability, global climate change, atmospheric science, pollution, and waste management. Also considered 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.

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- 4. Students will develop an understanding of how natural resources and the environment affect quality of life and the quest for sustainable development.
- 5. Students will explore contemporary issues in Environmental Science such as climate change, agricultural sustainability, pollutants and waste management, energy use and alternate energy sources, mineral and soil resources.

### **Course Schedule:**

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

## I. Fundamentals of Environmental Science (Weeks 1 - 4)

Introduction to Environmental Science

Population growth

Global distribution of population growth

Earth's carrying capacity

Affluence and technology

Ecological footprints and biocapacity debt

The rise of Environmental Science

Environmental science / Environmentalism / Environmental Justice

Models of sustainability

Nutrient cycles, eutrophication, and hypoxic zones

### II. Current Issues in Environmental Science (Weeks 5 - 9)

## Term test (20%) will be in Week 07 (Thursday, October 20)

Geology and plate tectonics

**Environmental systems** 

Productivity in ecosystems

Remote sensing and GIS

Agriculture, food, and biotechnology

Forests and forest management

Freshwater systems and water resources / Marine and coastal systems and fisheries

Atmospheric science and air pollution

Global climate change

Fossil Fuels: Energy use and impacts / Energy alternatives

Managing waste

**Environmental policy** 

### III. Conservation and Environmental Science (Weeks 10 - 14)

Selected topics in Conservation and Environmental Science

Case studies and student research project presentations

### Requirements:

Assignments, Tests and Exams, Quizzes:

All exams and assignments are announced and/or scheduled in advance. Assignments are due at the designated time; please see the late policy below for additional information about late submissions of assigned work.

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

A number of in-class activities will be completed throughout the semester. These include, but are not limited to, quizzes, group discussions, and in-class exercises. <u>Unannounced</u> lecture quizzes represent one of these activities and are short quizzes completed at the beginning of class that are based on recent course material. They are designed to encourage students to keep up with the material and to help students prepare for term tests and the final exam. Missed lecture activities (<u>including unannounced quizzes</u>) cannot be made up and, **if missed, will receive a grade of zero.** The format of assignments will vary according to the topic and the course needs.

The final exam will have a structure similar to the written term tests, with a combination of question formats. Approximately 60% of the 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.

# **Late Submission of Assignments:**

Over the course of term, we will be engaged in a number of projects that require both faculty-student and student-student collaboration. Often, these collaborations will culminate in assignments that will be turned in for a grade. Thus, it will be vital that all parties take responsibility for their part of these activities. As your instructor, I will provide clear objectives, adequate time, and necessary assistance for completing these assignments. As students, you will be responsible for managing your time such that you are prepared for due dates. However, when circumstances prevent students from turning in individual assignments on time, the following late policy will apply (details below). This policy will cover all lecture-related activities. However, the late policy does not cover written tests or the final exam, both of which must be completed in the allotted time.

Condition (calendar days include both weekdays and weekends)	Deduction
Assignment is turned in 1 calendar day after it is due (e.g. Due: Monday, handed in on Tuesday)	20%
Assignment is turned in 2 calendar days after it is due (e.g. Due: Monday, handed in Wednesday)	30%
Assignment is turned in 3 calendar days after it is due (e.g. Due: Friday, handed in on Monday)	40%
Assignment is turned in 4 calendar days after it is due (e.g. Due: Monday, handed in on Friday)	50%
Assignment is turned in 5 or more calendar days after it is due	100%

#### Attendance:

Regular attendance will be essential for success on all exams and assignments. No points will be subtracted from your grade for non-attendance but will affect the participation grade. However, in-class assignments and unannounced inclass quizzes cannot be made up and, **if missed, will receive a grade of zero**.

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Activ	ity		Percent of Grade				
Term	test			20			
Unan	nounced forma	itive lecture quizzes (2		5			
Smal	size class assig	nments and/or small s	<b>6</b> )	10			
Term	project		•	20			
	cipation and Dis	scussions		5			
Medi	um size class as	ssignments and/or me	at 5%)	10			
Final	Exam			30			
Δ.	05 100%	Outstanding	C.	CE 700/	Catiofactom		
A+	95-100%	Outstanding	C+	65-70%	Satisfactory		
A	90-95%	Excellent	С	60-65%	Satisfactory		
Α-	85-90%	Very Good	C-	55-60%	Poor		
B+	80-85%	Good	D	50-55%	Minimal Pass		
В	75-80%	Good	F	Below 50%	Fail		
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#### **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 college. 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.