EVR 3011 Environmental Resources and Pollution
Spring 2020 Hybrid Section U01
Thursdays 2 pm to 3:15 pm, GL 139

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Email: Email through Canvas
Office: AHC5 374
Office Hours: Thursdays noon to 1:30 pm or by appointment
Phone: (305) 348-3153

Course Description and Purpose

This is an advanced environmental science course for majors in the Department of Earth and Environment with a focus on Earth systems, especially energy and nutrient cycling, resource and energy use, and human impacts on Earth systems. This course will emphasize the physical, ecological and anthropogenic interactions that occur and relate them to environmental issues. Students will obtain a fundamental understanding of basic scientific principles governing environmental interactions and how they relate to sustainability.

Course Objectives

Upon completing this course, students will be able to:

- Describe the properties of Earth's natural systems and the flows of matter and energy in that system.
- Explain the impacts of human activities on the functioning of Earth's natural systems.
- Summarize selected scientific publications in the area of environmental science.
- Discuss critical environmental issues based on concepts learned in this course.

Policies

Before starting this course, please review the following pages for online policies at https://online.fiu.edu/html/canvas/policies/

Academic Integrity

Florida International University is a community dedicated to generating and imparting knowledge through excellent teaching and research, the rigorous and respectful exchange of ideas, and community service. All students should respect the right of others to have an equitable opportunity to learn and to honestly demonstrate the quality of their learning. Therefore, all students are expected to adhere to a standard of academic conduct, which demonstrates respect for themselves, their fellow students, and the educational mission of the University. All students are deemed by the University to understand that if they are found responsible for academic misconduct, they will be subject to the Student Conduct and Honor Code procedures and sanctions as outlined in the FIU Regulation 2501 and the Student Handbook.
Accessibility

The Disability Resource Center (DRC) collaborates with university faculty to provide inclusive learning environments. If you have a disability and plan to utilize academic accommodations, additional information may be found in the DRC's website: drc.fiu.edu.

Panthers Care

If you are looking for help for yourself or a fellow classmate, Panthers Care encourages you to express any concerns you may come across as it relates to any personal behavior concerns or worries you, for the classmate’s well-being or yours; you are encouraged to share your concerns with FIU’s Panthers Care website: http://PanthersCare.fiu.edu/.

Turnitin

The originality of submitted work (Discussion posts) will be evaluated using Turitin. Be sure to review the detailed Turnitin instructions (Links to an external site.) on how to submit your assignments and how to review the Grademark comments (feedback) from your professor. Significant evidence of plagiarism can result in a deduction in grade in accordance with the grading rubric or the filing of a formal academic misconduct charge with the Student Conduct and Academic Integrity Office.

*Please note, for any Turnitin assignment you will receive an email receipt upon submission of your assignment. Keep this in case the professor has an issue viewing your submission. If you do not receive this receipt, contact Support Services (Links to an external site.) immediately.*

Course Prerequisites

This course has prerequisites. MAC 1102 College Algebra or equivalent and an introductory science course are required prerequisites for EVR 3011. Review the Course Catalog (Links to an external site.) webpage for prerequisites information.

Proctored Exam Policy

There are no proctored exams in this course. This is a hybrid course, and exams will be held in-class at the times listed in this Syllabus.

Textbook and Course Materials

The open-source textbook for this course is available online at https://ecampusontario.pressbooks.pub/environmentalscience/ (Links to an external site.)

Required readings and videos will be posted with the associated modules in Canvas.

You are required to purchase an I>clicker classroom response device for the polling activity. You will not be permitted to use the REEF smartphone app in this course.
Expectations of this Course

This is a hybrid class. Half of the class time is replaced with online activities. The average classroom and study time for this course is 8 hours per week (typical for a 3-credit course).

Class time is for:

1. Explaining and practicing difficult concepts.
2. Getting an overview of major concepts, minor points, and how they fit together.
3. Asking and answering questions and use of classroom response system (i>clicker or REEF Polling smartphone App).
4. Taking higher stakes tests

Online activities are for:

1. Critical review and study of readings and videos with exercises to help in understanding the material.
2. Participating in online forums for the discussion of environmental topics

Students are expected to:

- review the getting started page located in the course modules;
- interact online and in-class with instructor and peers;
- review and follow the course calendar and weekly outlines;
- log in to the course at least each day Monday-Friday per week;
- respond to discussions by the due date specified. No late work will be accepted;
- respond to emails within one day;
- set Canvas notifications so that you are alerted to important course announcements.
- submit assignments by the corresponding deadline.

The instructor will:

- log in to the course Monday-Friday each day;
- respond to discussion postings within 7 days of the deadline;
- respond to emails within 24 hours Monday-Friday;
- grade assignments within 14 days of the assignment deadline.

Course Communication

Communication in this course will take place via the Canvas Inbox. Check out the Canvas Conversations Tutorial or Canvas Guide to learn how to communicate with your instructor and peers using Announcements, Discussions, and the Inbox. I will respond to all correspondences within 24 hours Monday-Friday.
Discussion Forums

Keep in mind that your discussion forum postings will likely be seen by other members of the course. Care should be taken when determining what to post.

People learn best when communicating their ideas. With limited time together in this course, we will use online Discussions so that everyone has a chance to participate in a conversation about important environmental issues. There will be four online Discussions throughout the semester due on Wednesdays at 11:59 pm as indicated in the Schedule. Each Discussion submission covers a two-week period and consists of a 500-word initial entry on an assigned topic that is due on Wednesday after the first week. You are also required to make a substantive reply (200 words) to two other student entries during the second week of the discussion. The initial Discussion posting must also be submitted to Turnitin first before posting on the Discussion board. Grading will be done using the rubric provided with each Discussion. There are no make-up or late assignments for Discussions since they are an interactive activity and cover a two-week period. You must plan appropriately to complete the Discussion during the two-week time window. The Discussions will make up 20% of your grade. Discussions will be graded no later than 14 days after the close of the Discussion.

Exams

There will be three exams held in class, worth a total of 59% of your grade (2 midterm exams =17% each, final exam=25%). Exams will consist of multiple choice questions or short answer questions. Exams will be cumulative. A make-up exam will only be available for an official FIU activity, documented medical emergency, legal obligation, or military service. The make-up exam will be scheduled within one week of the missed exam and will be an essay exam. You must request the makeup exam no later than the day of the scheduled exam. It is your responsibility to ensure your attendance at class on exam day. Please plan to remain at FIU until the end of the last week of the semester (Finals week). Leaving FIU for personal travel is not an excuse for a makeup exam.

Assignments

Please review the important information about assignments page.

Readings and Study Question Assignments

Reading and video assignments are accompanied by Study Questions that will assist you in learning the content for that topic. Study Question submissions are due Wednesdays at 11:59 pm prior to the class covering that topic. You will prepare your answers to the study questions and submit your answers individually to Canvas.

Since the objective of the study assignment is preparation for in-class activities the next day, no credit will be given for late submissions. Study Questions will make up 6% of your grade. Their value will be in preparation for in-class polling exercise and exams. The lowest Study Question grade will be dropped in the calculation of your final grade.

Class Activities

Directions to register I>Clickers will be provided in Canvas.
Class activities for the weekly class meetings will cover the topics shown in the schedule. Class activities will make up a total of 15% of your grade. Your one lowest grade for class activities (I>clicker polling and participation) will be dropped prior to the calculation of your final grades. You must be present in class and actively participating in the activities to receive credit for the day. Leaving class early will result in a loss of points for the day.

- Participation includes working on worksheets, problem analysis and discussion. You may be asked to work in small groups. You must be present in class and participating in the activities to receive credit for the day. Leaving class early will result in a loss of participation for the day.

- I>clicker Polling in class acts as a review of the assigned readings and video content and provides an opportunity for questions and further explanation of the content. Polling is worth 1 point per question, 0.5 point for answering the question, and 0.5 point for answering the question correctly. If you do not have an I>clicker for class you will receive a maximum of 0.5 point per question for participation.

Grading

<table>
<thead>
<tr>
<th>Course Requirements</th>
<th>Number of Items</th>
<th>Weight</th>
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</thead>
<tbody>
<tr>
<td><strong>Midterm Exams</strong></td>
<td>2</td>
<td>34% (17% each exam)</td>
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<tr>
<td><strong>Final Exam</strong></td>
<td>1</td>
<td>25%</td>
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<tr>
<td><strong>Online Discussions</strong></td>
<td>4</td>
<td>20% (5% each)</td>
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<td><strong>Study Questions</strong></td>
<td>10 (after drop of lowest grade)</td>
<td>6%</td>
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<tr>
<td><strong>In-Class Activities</strong></td>
<td>10 (after drop of lowest grade)</td>
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<td>Range %</td>
<td>Letter</td>
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<td>A-</td>
<td>90-94</td>
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<tr>
<td>B+</td>
<td>87-89</td>
<td>C+</td>
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NOTE: The Instructor reserves the right to make changes in the syllabus and course schedule when needed. An announcement of changes will be made in class and in Canvas.
EVR 3011 Environmental Resources and Pollution  
U01 Hybrid Section  
Spring 2020 Course Outline of Topics

Note: This schedule may be revised if needed. Announcements of any changes will be made in class and on Canvas.

<table>
<thead>
<tr>
<th>Week</th>
<th>Date (Mon-Fri)</th>
<th>Topic for Thursday Class</th>
<th>Activity Due Wednesday Prior to Class</th>
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<tbody>
<tr>
<td>1</td>
<td>Jan 6-10</td>
<td>Introduction to Course Introduction to Systems</td>
<td>First day of class exercise (paper)</td>
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<tr>
<td>2</td>
<td>Jan 13-17</td>
<td>The Physical World</td>
<td>Study Questions Week 2 due 1/15</td>
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<td>3</td>
<td>Jan 20-24</td>
<td>Energy and Ecosystems</td>
<td>Study Questions Week 3 due 1/22</td>
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<td>Jan 20 Flu closed</td>
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<td>Discussion #1 first post due 1/22</td>
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<td>4</td>
<td>Jan 27-31</td>
<td>Flows and Cycles</td>
<td>Study Questions Week 4 due 1/29</td>
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<td>Discussion #1 replies due 1/29</td>
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<td>5</td>
<td>Feb 3-7</td>
<td>Exam #1</td>
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<td>6</td>
<td>Feb 10-14</td>
<td>Environmental Stressors</td>
<td>Study Questions Week 6 due 2/12</td>
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<td>Discussion #2 first post due 2/12</td>
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<td>Feb 17-21</td>
<td>Biodiversity Loss</td>
<td>Study Questions Week 7 due 2/19</td>
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<td>Discussion #2 replies due 2/19</td>
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<td>Feb 24-28</td>
<td>Early Spring Break – No Classes</td>
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<td>9</td>
<td>Mar 2-6</td>
<td>Planetary Boundaries</td>
<td>Study Questions Week 9 due 3/4</td>
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<td>10</td>
<td>Mar 9-13</td>
<td>Exam #2 (Cumulative)</td>
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<td>Mar 16-20</td>
<td>Welcome to the Anthropocene</td>
<td>Study Questions Week 11 due 3/18</td>
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<td>March 16 drop deadline</td>
<td>Discussion #3 first post due 3/18</td>
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<td>Mar 23-27</td>
<td>Disturbances of the Carbon Cycle</td>
<td>Study Questions Week 12 due 3/25</td>
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<td>Discussion #3 replies due 3/25</td>
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<td>13</td>
<td>Mar 30-Apr 3</td>
<td>Disturbance of Other Nutrient Cycles</td>
<td>Study Questions Week 13 due 4/1</td>
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<td>14</td>
<td>Apr 6-10</td>
<td>Chemical Pollution</td>
<td>Study Questions Week 14 due 4/8</td>
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<td>Discussion #4 first post due 4/8</td>
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<td>Apr 13-17</td>
<td>Particulate Pollution</td>
<td>Study Questions Week 15 due 4/15</td>
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<td>Discussion #4 replies due 4/15</td>
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<td>16</td>
<td>Apr 20-25</td>
<td>Final Exam (Cumulative)</td>
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