Issues in Environmental Science (ESCI 4202.002)  
Department of Physical and Environmental Science  
Fall 2020

A. COURSE INFORMATION

Course number/section: ESCI 4202.002 (CRN 53324)  
Class meeting time: MWF 9:00 am – 9:50 pm  
Class location: OCNR 131 and online  
Course Website: bb9.tamucc.edu

B. INSTRUCTOR INFORMATION

Instructor: Dr. John S. Wood  
Office location: CS 130A  
Office hours: TBA, By WebEx  
Telephone: (o) 361-825-4185 (c) 361-548-2528  
e-mail: john.wood@tamucc.edu  
Appointments: Contact via email or phone to schedule an appointment. Additional hours available by appointment. All appointments will be by WebEx.

C. COURSE DESCRIPTION

Catalog Course Description  
Exploration of major issues in environmental science posing past, present, and future challenges. Selected readings, student presentation, and papers.

Extended Course Description  
This course is intended to improve your environmental literacy and familiarity with important environmental issues. There will be a large focus on interpretation, discussion, and presentation of ideas from environmental literature, especially primary literature. Course studies will also be used to familiarize with environmental issues. Topics may vary depending on current events, but examples include air and water pollution, water supply, climate change, ocean acidification, environmental management, energy resources, etc.

After taking this course, students should be able to discuss and express their scientifically-based opinions on a variety of contemporary topics.

D. PREREQUISITES AND COREQUISITES

Prerequisites  
Juniors/seniors only and ESCI 1401 - Environmental Science I: Intro to Environmental Science or permission of instructor.

Corequisites  
None

E. REQUIRED TEXTBOOK(S), READINGS AND SUPPLIES

Required Textbook(s)  
Available at: https://archive.org/stream/fp_Silent_Spring-Rachel_Carson-1962/Silent_Spring-Rachel_Carson-1962#page/n27/mode/2up
Scientific Journal Articles:
Throughout the semester, students will be required to read certain peer-reviewed journal articles, which will be made available through the class Blackboard site. In addition, students may be required to find, read and submit additional papers throughout the semester.

Supplies:
Students are encouraged to bring laptops or tablets to take notes and research topics, as long as doing so does not disrupt the class or keep the student from participating in the class discussions. Please do not do coursework for other classes during this class.

F. STUDENT LEARNING OUTCOMES AND ASSESSMENT
Assessment is a process used by instructors to help improve learning. Assessment is essential for effective learning because it provides feedback to both students and instructors. A critical step in this process is making clear the course’s student learning outcomes that describe what students are expected to learn to be successful in the course. The student learning outcomes for this course are listed below. By collecting data and sharing it with students on how well they are accomplishing these learning outcomes students can more efficiently and effectively focus their learning efforts. This information can also help instructors identify challenging areas for students and adjust their teaching approach to facilitate learning.

By the end of this course, students should be able to:
1. Describe the drivers and consequences of a multitude of environmental issues affecting society on global and regional scales.
2. Critically assess scientific literature about environmental issues.
3. Intelligently communicate the importance of environmental issues with the scientific community, specific stakeholders, and the general public via written and oral avenues.
4. Make connections between humans, their behaviors, and environmental issues.
5. Recommend and personally employ human action for solutions to environmental issues.

G. INSTRUCTIONAL METHODS AND ACTIVITIES
This course will use a variety of instructional methods including assigned readings, PowerPoint lecture presentations by the instructor, online videos, interactive case studies, literature discussions, and group projects. Active student participation in class discussions is essential for this class, and will contribute substantially to the final grade.

Due to the current CoViD-19 pandemic, this class will be classified as ‘Blended – 50% - 85%’, with a substantial portion conducted over the internet using WebEx or other online applications. It will be synchronous, meaning that online classes will be held at a prescribed time. Students are expected to sign in and participate each class day. Attendance and participation will be graded and are key to success.

H. MAJOR COURSE REQUIREMENTS AND GRADING
The student learning outcomes will be measured by student performance in written assignments, their verbal presentation of topics and literature to the class, and participation in class discussions and activities.
<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>% of FINAL GRADE</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participation</td>
<td>10%</td>
<td>100</td>
</tr>
<tr>
<td>Attendance</td>
<td>10%</td>
<td>100</td>
</tr>
<tr>
<td>Leading Group Discussion</td>
<td>15%</td>
<td>150</td>
</tr>
<tr>
<td>Group Presentation</td>
<td>15%</td>
<td>150</td>
</tr>
<tr>
<td>Written Assignments</td>
<td>20%</td>
<td>200</td>
</tr>
<tr>
<td>(Literature Summaries, In-class Case Study Assignments)</td>
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<td></td>
</tr>
<tr>
<td>Term Paper</td>
<td>20%</td>
<td>200</td>
</tr>
<tr>
<td>Final Exam</td>
<td>10%</td>
<td>100</td>
</tr>
<tr>
<td>TOTALS</td>
<td>100%</td>
<td>1000</td>
</tr>
</tbody>
</table>

**Leading Discussion** - (15%) Each student will be required to lead the class discussion on an assigned paper one time in the semester. While all students are responsible for reading the assigned paper, the discussion leaders must come prepared to extend the discussion throughout the entire class period. **Discussion leaders should each look up one additional paper that is related to the assigned paper so that they may summarize the findings of an additional paper to provide the class with a broader exposure to the topic.** The discussion should cover important topics in the paper, thoughts about the methods and findings, and the practical application of the research as it relates to the topics that we are covering in class.

**Written Assignments** - (20%) - Students will be required to write literature summaries for several of the assigned readings. Literature summaries (other than on *Silent Spring*) are due 24 hours prior to class that the paper will be discussed. Formatting requirements for literature summaries will be published on the class’s Blackboard site. Cover pages are never required or counted on page counts. No outside references or reference page will be required for paper summaries.

- All students must complete a 3-page literature summary of *Silent Spring* (10%), due 10/5.
- All students must provide a written 2-page summary of their assigned topic paper (10%).
- Literature summaries are due prior to class on the day that the paper will be discussed.

**Group Presentation** - (15%) Presentations will be done in groups on a chosen environmental issue. Groups should be formed and the topic should be emailed to the instructor for approval by September 9th. Presentations should be 12 minutes in length with time for an additional 3 minutes of questions from the audience. Presentations may be formatted as if you are presenting to either the general public or a specific group of stakeholders in the issue. Each group member must participate in the presentation. No videos will be allowed without Instructor approval. Presentation should be submitted 24 hours early.

**Term Paper** - (20%) Students will individually complete term papers that are on the topic that their group presentation will cover. This paper should be directed to the scientific community. The paper should cover the detailed background of the environmental issue, where it is occurring, who it is affecting, and your proposed plan for alleviating the negative effects. Peer reviewed journal sources must be cited in proper (revised) APA format - this forces you to find background information for your presentation in advance! The final draft is due November 4th. After the papers have been submitted, group members may wish to compile their sources to make an effective final presentation. Papers should be 5-8 pages in length, including an APA ‘References’ page.

**Final Exam** – (10%) The Final Exam will be given during Final Exam Week, and will cover topics from class discussions, as found in the schedule below.
## I. COURSE CONTENT/SCHEDULE

<table>
<thead>
<tr>
<th>DATE</th>
<th>TOPIC</th>
<th>READING(S)</th>
<th>ASSIGNMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>8/19 – 8/21</td>
<td>Introduction to Course Pesticide Use (Case Study)</td>
<td>Syllabus Silent Spring 1-4</td>
<td>Read Silent Spring</td>
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<tr>
<td>8/24 – 8/28</td>
<td>Silent Spring Discussion and Video</td>
<td>Chapters 5-9</td>
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<tr>
<td>8/31 – 9/4</td>
<td>Silent Spring Discussion and Final Silent Spring Discussion and Video</td>
<td>Chapters 15 - 17</td>
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<td>9/7</td>
<td><strong>Labor Day! No Class!</strong></td>
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<tr>
<td>9/9 – 9/11</td>
<td>Water Pollution – Eutrophication Water Supply</td>
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<td>9/14 – 9/25</td>
<td>Climate Change Basics (Lecture) Climate Change</td>
<td>Provided paper</td>
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<tr>
<td>9/28 – 10/2</td>
<td>Climate Change and Ocean Acidification Climate Change – Sea Level Rise</td>
<td>Provided paper</td>
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<tr>
<td>10/5 – 10/9</td>
<td>Wetlands Wetland Loss Freshwater Wetlands</td>
<td>Provided paper</td>
<td>Silent Spring Lit. Summary Due 10/5</td>
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<td>10/12 – 10/16</td>
<td>Energy Resources The Future of Oil Renewable Energy Resources</td>
<td>Provided paper</td>
<td>Term Paper Due 11/4</td>
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<tr>
<td>10/19 – 10/23</td>
<td>Recycling in Corpus Christi Modern Recycling Methods Recycling -Does it work?</td>
<td>Provided paper</td>
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<td>10/26 – 10/30</td>
<td>Illegal Fishing Deer Breeding in Texas Chronic Wasting Disease</td>
<td>Provided paper</td>
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<tr>
<td>11/2 – 11/6</td>
<td>Invasive Plants Pandemics Murder Hornets and Other Nasties</td>
<td>Provided paper</td>
<td>Last Day to Drop a Class, November 5th</td>
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<tr>
<td>11/9 – 11/13</td>
<td>Ecosystem-Based Management Hazardous Algae Blooms Fracking</td>
<td>Provided paper</td>
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<tr>
<td>11/23</td>
<td>Student Group Presentations</td>
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<tr>
<td></td>
<td><strong>Last Class!</strong></td>
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</table>
11/25  Reading Day! No Classes
12/1  Final Exam during Exam Week
12/7

Note: Changes in this course schedule may be necessary and will be announced to the class by the Instructor. The assignments shown are directly related to the Student Learning Outcomes described in Section F.

J. COURSE POLICIES

COVID-19
Face Coverings – (cloth face covering, surgical mask, etc.) must be properly worn in all non-private spaces including classrooms, teaching laboratories, common spaces such as lobbies and hallways, public study spaces, libraries, academic resource and support offices, and outdoor spaces where 6 feet of physical distancing is difficult to reliably maintain. Extra masks will be made available if needed.

Attendance/Tardiness
Attendance is required and makes up a substantial portion of your grade in this course. Any absence without a valid, reported excuse will result in \text{the deduction of 5\%} of your total grade. Excessive tardiness may also result in deduction of attendance points at the discretion of the instructor. Please notify of excused absences in advance, if at all possible.

Late Work and Make-up Exams
The Final Exam for this class is scheduled for Finals Week, and exact details will be determined at a later date. Written assignments are due at the beginning of class on the date announced. For every day that assignments are late, there will be a 20\% reduction in the possible score. An assignment that is 5+ days late will not receive credit. Please discuss extenuating circumstances in advance if at all possible, as leniency may be granted at the discretion of the instructor.

Extra Credit
Extra credit opportunities may be offered to the entire class at the discretion of the instructor. These extra credit opportunities will often require visits to the ‘Writing Center’ and other resources available on campus. No extra credit will be offered or accepted after Thanksgiving. No late submissions for Extra Credit.

Cell Phone Use
Cell phones should not be used during class. In case of emergency, please leave the room. Repeated distractions and lack of attention due to cell phone use in class will result in a deduction of class participation points at the discretion of the instructor.

Laptop Use
Laptop use in class is encouraged for note taking and reference to the PowerPoint and articles that are being discussed. Laptop use should only be for the use of class materials, and laptop use that distracts the student from the class may result in a deduction of class participation points at the discretion of the instructor.

Food in Class
Food is allowed in class as long as it does not cause distraction to other students. Clean up after yourself.

Blackboard
Blackboard will be used extensively in this class. The student is responsible for making sure
that submissions are made timely, and that Blackboard accepts and show the assignment. Grades will be managed in Blackboard; please check them often. All submissions should be in ‘MS Word’ format except journal article submissions should be in PDF format.

**Participation**

Participation in classroom discussion and activities is essential to achieving the learning outcomes of this course and therefore will make up a substantial portion of the student’s grade and responsibility (15%). Every student is expected to contribute to all class discussions and case study activities and will be monitored by the instructor. A **deduction of 5%** of the total grade will occur for each day that the student is not actively participating. Note that a negative participation grade is possible.

**Appointments**

Please avoid ‘ambushing’ the professor before or after class. All appointments will be conducted online at a mutually agreed time, via WebEx or a similar program. Please arrange appointments in advance, through e-mail.

K. **COLLEGE AND UNIVERSITY POLICIES**

- **Academic Integrity (University)**
  University students are expected to conduct themselves in accordance with the highest standards of academic honesty. Academic misconduct for which a student is subject to penalty includes all forms of cheating, such as illicit possession of examinations or examination materials, falsification, forgery, complicity or plagiarism. (Plagiarism is the presentation of the work of another as one’s own work.) In this class, academic misconduct or complicity in an act of academic misconduct on an assignment or test will result in a failing grade.

- **Classroom/Professional Behavior**
  Texas A&M University-Corpus Christi, as an academic community, requires that each individual respect the needs of others to study and learn in a peaceful atmosphere. Under Article III of the Student Code of Conduct, classroom behavior that interferes with either (a) the instructor’s ability to conduct the class or (b) the ability of other students to profit from the instructional program may be considered a breach of the peace and is subject to disciplinary sanction outlined in article VII of the Student Code of Conduct. Students engaging in unacceptable behavior may be instructed to leave the classroom. This prohibition applies to all instructional forums, including classrooms, electronic classrooms, labs, discussion groups, field trips, etc.

- **Statement of Civility**
  Texas A&M University-Corpus Christi has a diverse student population that represents the population of the state. Our goal is to provide you with a high quality educational experience that is free from repression. You are responsible for following the rules of the University, city, state and federal government. We expect that you will behave in a manner that is dignified, respectful and courteous to all people, regardless of sex, ethnic/racial origin, religious background, sexual orientation or disability. Behaviors that infringe on the rights of another individual will not be tolerated.

- **Deadline for Dropping a Course with a Grade of W (University)**
  I hope that you never find it necessary to drop this or any other class. However, events can sometimes occur that make dropping a course necessary or wise. **Please consult with your academic advisor, the Financial Aid Office, and me, before you decide to drop this course.** Should dropping the course be the best course of action, you must initiate the process to drop the course by going to the Student Services Center and filling out a course
drop form. Just stopping attendance and participation WILL NOT automatically result in your being dropped from the class. Please consult the Academic Calendar (http://www.tamucc.edu/academics/calendar/) for the last day to drop a course.

- **Grade Appeals (College of Science and Engineering)**
  As stated in University Procedure 13.02.99.C0.03, Student Grade Appeal Procedures, a student who believes that he or she has not been held to appropriate academic standards as outlined in the class syllabus, equitable evaluation procedures, or appropriate grading, may appeal the final grade given in the course. The burden of proof is upon the student to demonstrate the appropriateness of the appeal. A student with a complaint about a grade is required to first discuss the matter with the instructor. For complete details, including the responsibilities of the parties involved in the process and the number of days allowed for completing the steps in the process, see University Procedure 13.02.99.C0.03, Student Grade Appeal Procedures. These documents are accessible through the University Rules website at http://academicaffairs.tamucc.edu/rules_procedures/assets/13.02.99.c0.03_student_grade_appeals.pdf. For assistance and/or guidance in the grade appeal process, students may contact the chair or director of the appropriate department or school, the Office of the College of Science and Engineering Dean, or the Office of the Provost.

- **Civil Rights Complaints**
  Texas A&M University-Corpus Christi is committed to fostering a culture of caring and respect that is free from discrimination, relationship violence and sexual misconduct, and ensuring that all affected students have access to services. For information on reporting Civil Rights complaints, options and support resources (including pregnancy support accommodations) or university policies and procedures, please contact the University Title IX Coordinator, Sam Ramirez (Samuel.ramirez@tamucc.edu) or Deputy Title IX Coordinator, Rosie Ruiz (Rosie.Ruiz@tamucc.edu) x5826, or visit website at Title IX/Sexual Assault/Pregnancy.

- **Limits to Confidentiality.**
  Essays, journals, and other materials submitted for this class are generally considered confidential pursuant to the University's student record policies. However, students should be aware that University employees, including instructors, are not able to maintain confidentiality when it conflicts with their responsibility to report alleged or suspected civil rights discrimination that is observed by or made known to an employee in the course and scope of their employment. As the instructor, I must report allegations of civil rights discrimination, including sexual assault, relationship violence, stalking, or sexual harassment to the Title IX Coordinator if you share it with me. These reports will trigger contact with you from the Civil Rights/Title IX Compliance office who will inform you of your options and resources regarding the incident that you have shared. If you would like to talk about these incidents in a confidential setting, you are encouraged to make an appointment with counselors in the University Counseling Center.

- **Statement of Academic Continuity**
  In the event of an unforeseen adverse event, such as a major hurricane and classes could not be held on the campus of Texas A&M University–Corpus Christi; this course would continue through the use of Blackboard and/or email. In addition, the syllabus and class activities may be modified to allow continuation of the course. Ideally, University facilities (i.e., emails, web sites, and Blackboard) will be operational within two days of the closing of the physical campus. However, students need to make certain that the course instructor
has a primary and a secondary means of contacting each student.

I. OTHER INFORMATION
   • Academic Advising
     The College of Science & Engineering requires that students meet with an Academic Advisor as soon as they are ready to declare a major. The Academic Advisor will set up a degree plan, which must be signed by the student, a faculty mentor, and the department chair. Meetings are by appointment only; advisors do not take walk-ins. Please call or stop by the Advising Center to check availability and schedule an appointment. The College’s Academic Advising Center is located in Center for Instruction 350 or can be reached at (361) 825-3928.

GENERAL DISCLAIMER

I reserve the right to modify the information, schedule, assignments, deadlines, and course policies in this syllabus if and when necessary. I will announce such changes in a timely manner during regularly scheduled lecture periods.