Environmental Health ESCI 4320
Department of Physical and Environmental Sciences
Fall 2019

A. COURSE INFORMATION
Course number/section: ESCI 4320.W01
Class meeting time: Online
Class location: Online via Blackboard
Course Website: http://Bb9.tamucc.edu

B. INSTRUCTOR INFORMATION
Instructor: Nathan Payne
Office location: virtual; meetings conducted by telephone call or online.
Office hours: Tues. 5-6 pm. Additional hours available by appointment.
Telephone: 361.945.1349
e-mail: Nathan.payne@tamucc.edu
Appointments: By email or phone.

C. COURSE DESCRIPTION
Catalog Course Description
Overview of the toxicology and epidemiology of pollutants in the air, water and soil. Associations of environmental exposure with adverse health effects such as cancer, cardiovascular disease, and reproductive outcomes; also chemical markers and symptoms of disease. Pollutants studied include lead, asbestos, radiation, radon, noise, metals, halogenated hydrocarbons, aromatic hydrocarbons, silica, indoor air quality, formaldehyde, and outdoor air pollutants.

D. PREREQUISITES AND COREQUISITES
Prerequisites
None
Corequisites
None

E. REQUIRED TEXTBOOK(S), READINGS AND SUPPLIES
Required
Textbook(s)
Optional Textbook(s) or Other References
None

Supplies
None

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. Understand the basic concepts of toxicology, epidemiology, and regulations relating to the Environmental Health field
2. Understand the association of environmental pollutants and human adverse health effects
3. Identify types and sources of pollutants
4. Describe options of pollution monitors and controls.

G. INSTRUCTIONAL METHODS AND ACTIVITIES
Course content will be delivered via Blackboard.

H. MAJOR COURSE REQUIREMENTS AND GRADING
Achievement of the Course Objectives will be measured by weekly chapter quizzes, three exams, participation in a group discussion board, and weekly assignments.

<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>% of FINAL GRADE</th>
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<tbody>
<tr>
<td>Class Discussions (12 @ 10 points)</td>
<td>120 points</td>
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<tr>
<td>Article Reviews (12 @ 15 points)</td>
<td>180 points</td>
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<tr>
<td>Chapter Quizzes (12 @ 20 points)</td>
<td>240 points</td>
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<tr>
<td>Exams (3 @ 100 points)</td>
<td>300 points</td>
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### I. COURSE CONTENT/SCHEDULE

<table>
<thead>
<tr>
<th>Date</th>
<th>Chapter</th>
<th>Assignment</th>
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<tbody>
<tr>
<td>8/26-9/1</td>
<td>Chap 1 – Introduction: The Environment</td>
<td>Intro Discussion, Quiz Due Sunday @ 11:59pm</td>
</tr>
<tr>
<td>9/2-9/8</td>
<td>Chap 2 – Environmental Epidemiology</td>
<td>Chap 2 Discussion, Quiz, and Article Review Due Sunday @ 11:59pm</td>
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<tr>
<td>9/-9/15</td>
<td>Chap 3 - Environmental Toxicology</td>
<td>Chap 3 Discussion, Quiz, and Article Review Due Sunday @ 11:59pm</td>
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<tr>
<td>9/16-9/22</td>
<td>Chap 4 – Environmental Policy and Regulation</td>
<td>Chap 4 Discussion, Quiz, and Article Review Due Sunday @ 11:59pm</td>
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<tr>
<td>9/23-9/29</td>
<td><strong>Exam 1 (Chap 1-4) Background of the Field</strong></td>
<td><strong>Exam 1 on Sunday 9/30 (Chap 1-4)</strong></td>
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<tr>
<td>9/30-10/6</td>
<td>Chap 5 – Zoonotic and Vector-Borne Diseases</td>
<td>Chap 5 Discussion, Quiz, and Article Review Due Sunday @ 11:59pm</td>
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<tr>
<td>10/7-10/13</td>
<td>Chap 6 – Toxic metals and Elements</td>
<td>Chap 6 Discussion, Quiz, and Article Review Due Sunday @ 11:59pm</td>
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<tr>
<td>10/14-10/20</td>
<td>Chap 7 – Pesticides and Other Organic Chemicals</td>
<td>Chap 7 Discussion, Quiz, and Article Review Due Sunday @ 11:59pm</td>
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<tr>
<td>10/21-10/27</td>
<td>Chap 8 – Ionizing and Non-ionizing Radiation</td>
<td>Chap 8 Discussion, Quiz, and Article Review Due Sunday @ 11:59pm</td>
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<tr>
<td>10/28-11/3</td>
<td><strong>Exam 2 (Chap 5-8) Agents of Environmental Disease</strong></td>
<td><strong>Exam 2 on Sunday 11/4 (Chap 5-8)</strong></td>
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<tr>
<td>11/4-11/10</td>
<td>Chap 9 – Water Quality</td>
<td>Chap 9 Discussion, Quiz, and Article Review Due Sunday @ 11:59pm</td>
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<tr>
<td>11/11-11/17</td>
<td>Chap 10 – Air Quality</td>
<td>Chap 10 Discussion, Quiz, and Article Review Due Sunday @ 11:59pm</td>
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<td>11/18-11/24</td>
<td>Chap 12 – Solid and Liquid Wastes</td>
<td>Chap 12 Discussion, Quiz, and Article Review Due Sunday @ 11:59pm</td>
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<td>11/25-12/1</td>
<td>Chap 11 – Food Safety</td>
<td>Chap 11 Discussion, Quiz, and Article Review Due Sunday @ 11:59pm</td>
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<td>12/2-12/8</td>
<td>Chap 13 – Occupational Health</td>
<td>Chap 13 Discussion, Quiz, and Article Review Due Sunday @ 11:59pm</td>
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<td>12/8</td>
<td><strong>Exam 3 (Chap 9-13) Applications of Environmental Health</strong></td>
<td><strong>Exam 3 on Tuesday 12/9 (Chap 9-13)</strong></td>
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Note: Changes in this course schedule may be necessary and will be announced to the class by the Instructor. The assignments and exams shown are directly related to the Student Learning Outcomes described in Section F.
J. COURSE POLICIES

Late Work and Make-up Exams
Make up exams will only be given for University excused absences to attend University sanctioned events (ie. Athletic teams, Health and Safety conference) or documented medical reasons. In those cases it is the responsibility of the student to arrange for scheduling of a makeup exam no later than one week after the regular scheduled exam.

A. 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.C2.01, 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 encouraged 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.C2.01, Student Grade Appeal Procedures. These documents are accessible through the University Rules website at http://www.tamucc.edu/provost/university_rules/index.html, and the College of Science and Engineering Grade Appeals webpage at http://sci.tamucc.edu/students/GradeAppeal.html. 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.

- Disability Services
The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please call (361) 825-5816 or visit Disability Services in Corpus Christi Hall 116.

If you are a returning veteran and are experiencing cognitive and/or physical access issues in the classroom or on campus, please contact the Disability Services office for assistance at (361) 825-5816.

http://disabilityservices.tamucc.edu/

- 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.

B. 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.