Industrial Hygiene ESCI 4322
Department of Physical and Environmental Sciences
Summer 2019

A. COURSE INFORMATION

Course number/section: ESCI 4322.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 5-6pm. Additional hours available by appointment
Telephone: 361.945.1349
e-mail: Nathan.payne@tamucc.edu
Appointment: By email or phone

C. COURSE DESCRIPTION

Catalog Course Description
Health protection practices in the industrial environment. Health basis for OSHA laws, regulations. Sampling and testing procedures.

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 ethics in industrial hygiene practices.
2. Recognize and identify common workplace illness and their associated causes and treatment.
3. Understand the federal and state regulations regarding the practice of industrial hygiene.
4. Recognize basic industrial hygiene sampling equipment.

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 (15 @ 10 points)</td>
<td>150 points</td>
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<tr>
<td>Observation Assignments (3 @ 50 points)</td>
<td>150 points</td>
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<tr>
<td>Chapter Quizzes (14 @ 15 points)</td>
<td>210 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>6/3–6/9</td>
<td>Chap 1 - Introduction to Industrial Hygiene</td>
<td>Chap 1 Quiz and Discussion due by 6/9 at 11:59pm</td>
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<tr>
<td>6/10–6/16</td>
<td>Chap 2 – Occupational Safety and Health Act and Industrial Hygiene / Chap 3 – Management Systems</td>
<td>Chap 2/3 Quiz and Discussion due by 6/16 at 11:59pm</td>
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<tr>
<td>6/17–6/23</td>
<td>Chap 4 – Basic Concepts in Industrial Toxicology / Chap 5 – Occupational Exposure Limits and Assessment of Chemical Risks</td>
<td>Chap 4/5 Quiz and Discussion due by 6/23 at 11:59pm</td>
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<tr>
<td>6/24–6/30</td>
<td>Chap 6 – Gases and Vapors / Chap 7 – Aerosols</td>
<td>Chap 6/7 Quiz and Discussion due by 6/30 at 11:59pm; Exam 1 on Sunday 6/30 (Chap 1-5)</td>
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<tr>
<td>7/1–7/7</td>
<td>Chap 8 - Ventilation / Chap 9 – Respiratory Protection</td>
<td>Chap 8/9 Quiz and Discussion due by 7/7 at 11:59pm</td>
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<tr>
<td>7/8–7/14</td>
<td>Chap 10 – Dermal Hazards</td>
<td>Chap 10 Quiz and Discussion due by 7/14 at 11:59pm</td>
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<tr>
<td>7/15–7/21</td>
<td>Chap 11 - Noise / Chap 12 – Radiation</td>
<td>Chap 11/12 Quiz and Discussion due by 7/21 at 11:59pm; Exam 2 on Sunday 7/21 (Chap 10-14)</td>
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<tr>
<td>7/22–7/28</td>
<td>Chap 13 – Thermal Stressors</td>
<td>Chap 13 Quiz and Discussion due by 7/28 at 11:59pm;</td>
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<td>7/29–8/4</td>
<td>Chap 14 – Ergonomics</td>
<td>Chap 14 Quiz and Discussion due by 8/4 at 11:59pm</td>
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<tr>
<td>8/5–8/9</td>
<td>Chap 15 – Biological Hazards; Exam 3</td>
<td>Chap 15 Quiz and Discussion due by 8/9 at 11:59pm; Exam 3 on 8/9 (Chap 10-15)</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.

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/](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.

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 online in a timely manner through Blackboard.