Syllabus
Advanced Environmental Health and Safety
ENVR 5304-001
Fall 2023

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Office: FO 123
Office Hours: Tuesday/Thursday 10:30 AM-12:15 PM, Wednesday 11:00 AM-12:30 PM
Department: Division of Environmental Science
Class meeting time and place: Tuesday/Thursday 8:00-9:15 AM in FO 240

Course Description
Introduction to occupational and environmental health and safety hazards. Evaluation methods and general principles of control measures are presented. Approaches to the application of regulatory requirements are discussed.

Course Modality
Advanced Environmental Health and Safety (ENVR 5304) is a full-semester course that meets face-to-face twice a week.

Program Learning Outcomes
1. Demonstrate critical thinking and application of knowledge gained in the course that can be implemented in environmental health and safety assessment and management (PLO#1).
2. Students will be given real world scenarios that will require critical thinking in order to solve as related to environmental risk assessment (PLO#2).
3. Students will demonstrate knowledge of pertinent environmental regulations and how the regulations are to be applied in order to assure compliance and protect human and environmental health (PLO#3, PLO#1).
4. Demonstrate competency and critical thinking communicated through effective scientific written reports and oral presentations (PLO#4).
5. Know what formulas/statistics and how to apply them in environmental risk assessment (PLO#5, PLO#2).

M.S. Environmental Science Program Learning Outcomes Proficiency Levels

<table>
<thead>
<tr>
<th>Course</th>
<th>PLO #1 Environmental Health and Safety</th>
<th>PLO #2 Environmental Risk Assessment</th>
<th>PLO #3 Environmental Regulation and Compliance</th>
<th>PLO #4 Effective Scientific Written and Oral Reports</th>
<th>PLO #5 Statistical Methods and Data Management</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENVR 5304</td>
<td>M</td>
<td>A</td>
<td>A</td>
<td>A</td>
<td>I</td>
</tr>
</tbody>
</table>

N/A = Not Applicable  B = Basic  I = Intermediate  A=Advanced  M=Mastery

Student Learning Outcomes
1. Upon completion of the course, students should:
2. Students are expected to understand the components of an Environment, Health, and Safety program and how to implement it within a professional organization (PLO#1).
3. Students will understand how to perform a risk-based environmental assessment (PLO#2).
4. Students will know the regulatory requirement that govern environmental health and safety and what methods are used to assure compliance to the regulations (PLO#3).
5. Students will prepare written reports and procedures, which will help them develop the skill set...
expected of them when they enter their profession (PLO#4).

6. Statistical methods and data analysis will be introduced and utilized as pertaining to risk assessment (PLO#5, PLO#2)

Text and Materials

Required text:

Additional readings from published journal articles, websites, or other resources might be assigned throughout the semester. These materials will be shared via Brightspace (D2L) as needed.

Grading Policy

Course grades will be calculated as follows:

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>In-class Participation</td>
<td>20%</td>
</tr>
<tr>
<td>Research Paper</td>
<td>20%</td>
</tr>
<tr>
<td>Research Presentation</td>
<td>10%</td>
</tr>
<tr>
<td>Midterm Exam</td>
<td>25%</td>
</tr>
<tr>
<td>Final Exam</td>
<td>25%</td>
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</table>

Letter assignment: A = 90-100, B = 80-89, C = 70-79, D = 60-69, F = <60
Graduate students must earn 80% or above in order to receive credit for the course.

Course Requirements

In-class Participation

Each week, students will receive a grade for in-class participation. This grade will be based on student preparedness to participate in discussions of course topics, answer questions related to the week’s readings, or present solutions for ungraded problems presented in class. At the end of each class, I will clearly outline my expectations for the following meeting (i.e., reading a textbook chapter, journal article, etc.). Failure to come to class without an official excused absence will result in a deduction for the week’s participation grade.

Research Project

Students will participate in a group project (2-3 students) that has both a written (20%) and oral component (10%). The purpose of this research project is to give students the opportunity to apply what they have learned in this course to a real-world scenario. Details regarding the project, as well as options for topics, will be provided no later than Week 4.

Exams

Students will take both a midterm exam and a final exam. Exams consist of short answer, essay, and problem-solving style questions. The final exam is comprehensive, although it will rely more heavily on the second half of the course.

Contact Hours and Study Hours

The federal definition of a credit hour is an amount of work represented in intended learning outcomes and verified by evidence of student achievement that is an institutionally established equivalency that reasonably approximates not less than one hour of classroom or direct faculty instruction and a minimum of two hours out-of-class student work each week for approximately fifteen weeks for one semester or trimester hour of credit. In this three-credit hour course, students can expect to spend approximately three hours each week in lecture a minimum of 6 hours outside of class on course related readings, homework, etc.
### Course Calendar*

<table>
<thead>
<tr>
<th>Topic</th>
<th>Week</th>
<th>Reading*</th>
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</thead>
<tbody>
<tr>
<td>Introduction to Environmental Health</td>
<td>Week 1</td>
<td>Ch 1, 10, and 11</td>
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<tr>
<td>Ecology and Ecosystems’ Role Upon Human Health</td>
<td>Week 2</td>
<td>Ch 2</td>
</tr>
<tr>
<td>Environmental Sustainability and Health</td>
<td>Week 3</td>
<td>Ch 3</td>
</tr>
<tr>
<td>Environmental Auditing</td>
<td></td>
<td></td>
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<tr>
<td>Environmental and Occupational Epidemiology</td>
<td>Week 4</td>
<td>Ch 4</td>
</tr>
<tr>
<td>Worker Health and Safety &amp; Risk Communication</td>
<td>Week 5</td>
<td>Ch 21, 23, and 28</td>
</tr>
<tr>
<td>Introduction to Environmental Toxicology and Geospatial Data for Environmental Health</td>
<td>Week 6</td>
<td>Ch 5 &amp; 6</td>
</tr>
<tr>
<td>Environmental Health-Based Risk Assessment</td>
<td>Week 7</td>
<td>Ch 27</td>
</tr>
<tr>
<td>MIDTERM</td>
<td><strong>10/10/2023</strong></td>
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</tr>
<tr>
<td>Exposure Monitoring and Assessment; Industrial Hygiene</td>
<td>Week 8</td>
<td>Ch 8</td>
</tr>
<tr>
<td>Climate Change: Impacts on Human Health Air</td>
<td>Week 9</td>
<td>Ch 12</td>
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<tr>
<td>Pollution</td>
<td>Week 10</td>
<td>Ch 14</td>
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<tr>
<td>Energy and Human Health</td>
<td>Week 11</td>
<td>Ch 16</td>
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<tr>
<td>Water Quality Impacts</td>
<td>Week 12</td>
<td>Ch 17 and 20</td>
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<tr>
<td>Solid and Hazardous Waste; Buildings and Health</td>
<td>Week 13</td>
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<tr>
<td>THANKSGIVING</td>
<td></td>
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<tr>
<td>Pest Control and Pesticide Management Practices</td>
<td>Week 14</td>
<td>Ch. 18</td>
</tr>
<tr>
<td>Project Paper Due</td>
<td><strong>11/30/2023</strong></td>
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<tr>
<td>Food Systems, the Environment, and Public Health</td>
<td>Week 15</td>
<td>Ch 19</td>
</tr>
<tr>
<td>Project Presentations</td>
<td><strong>12/7/2023</strong></td>
<td></td>
</tr>
<tr>
<td>Final Exam</td>
<td><strong>12/12/2023 8-10:00 AM</strong></td>
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*As the instructor of this course, I, Jenny Rashall, reserve the right to modify the course calendar as needed. Changes to the schedule or topics will be announced via Brightspace (D2L) and in the classroom. Supplementary materials in addition to textbooks chapters may be provided as needed.

**Attendance Policy**

In-class attendance is required for this course. Failure to attend class will result in a deduction of the weekly participation grade. Excused absences will be granted on a case-by-case basis. Be sure to reach out to me to discuss your absence!

**Academic Integrity (4.1)**

The Code of Student Conduct and Academic Integrity outlines the prohibited conduct by any student enrolled in a course at SFA. It is the responsibility of all members of all faculty, staff, and students to adhere to and uphold this policy.

Articles IV, VI, and VII of the new Code of Student Conduct and Academic Integrity outline the violations and procedures concerning academic conduct, including cheating, plagiarism, collusion, and misrepresentation. Cheating includes, but is not limited to: (1) Copying from the test paper (or other assignment) of another student, (2) Possession and/or use during a test of materials that are not authorized by the person giving the test, (3) Using, obtaining, or attempting to obtain by any means the whole or any part of a non-administered test, test key, homework solution, or computer program, or using a test that has been administered in prior classes or semesters without permission of the Faculty member, (4) Substituting for another person, or permitting another person to substitute for one’s self, to take a test, (5) Falsifying research data, laboratory reports, and/or other records or academic work offered for credit, (6) Using any sort of unauthorized resources or technology in completion of educational activities.

Plagiarism is the appropriation of material that is attributable in whole or in part to another source or the use of one’s
own previous work in another context without citing that it was used previously, without any indication of the original source, including words, ideas, illustrations, structure, computer code, and other expression or media, and presenting that material as one’s own academic work being offered for credit or in conjunction with a program course or degree requirements.

Collusion is the unauthorized collaboration with another person in preparing academic assignments offered for credit or collaboration with another person to commit a violation of any provision of the rules on academic dishonesty, including disclosing and/or distributing the contents of an exam.

Misrepresentation is providing false grades or résumés; providing false or misleading information in an effort to receive a postponement or an extension on a test, quiz, or other assignment for the purpose of obtaining an academic or financial benefit for oneself or another individual or to injure another student academically or financially.

Use of ChatGPT (or other similar AI tools or software) is not allowed in this course for any part of a graded assignment. Doing so is considered a violation of the cheating and plagiarism standards of the SFA Code of Conduct and Academic Integrity HOP.

**Withheld Grades Semester Grades Policy (5.5)**
Ordinarily, at the discretion of the instructor of record and with the approval of the academic chair/director, a grade of WH will be assigned only if the student cannot complete the coursework because of unavoidable circumstances. Students must complete the work within one calendar year from the end of the semester in which they receive a WH, or the grade automatically becomes an F. If students register for the same course in future terms the WH will automatically become an F and will be counted as a repeated course to compute the grade point average. For additional information, go to [https://www.sfasu.edu/policies/course-grades-5.5.pdf](https://www.sfasu.edu/policies/course-grades-5.5.pdf).

**Students with Disabilities**
To obtain disability-related accommodations, alternate formats, and/or auxiliary aids, students with disabilities must contact the Office of Disability Services (ODS), Human Services Building, and Room 325, 468-3004 / 468-1004 (TDD) as early as possible in the semester. Once verified, ODS will notify the course instructor and outline the accommodation and/or auxiliary aids to be provided. Failure to request services promptly may delay your accommodations. For additional information, go to [http://www.sfasu.edu/disabilityservices/](http://www.sfasu.edu/disabilityservices/).

**Student Wellness and Well-Being**
SFA values students’ overall well-being, mental health and the role it plays in academic and overall student success. Students may experience stressors that can impact both their academic experience and their personal well-being. These may include academic pressure and challenges associated with relationships, emotional well-being, alcohol and other drugs, identities, finances, etc.

If you are experiencing concerns, seeking help, SFA provides a variety of resources to support students’ mental health and wellness. Many of these resources are free, and all of them are confidential.

**On-campus Resources:**
**The Dean of Students Office** (Rusk Building, 3rd floor lobby)
[www.sfasu.edu/deanofstudents](http://www.sfasu.edu/deanofstudents)
936.468.7249
dos@sfasu.edu

**SFA Human Services Counseling Clinic** Human Services, Room 202
[www.sfasu.edu/humanservices/139.asp](http://www.sfasu.edu/humanservices/139.asp)
936.468.1041

**The Health and Wellness Hub** “The Hub”
Location: corner of E. College and Raguet St.

To support the health and well-being of every Lumberjack, the Health and Wellness Hub offers comprehensive services that treat the whole person – mind, body and spirit. Services include:

- Health Services
- Counseling Services
- Student Outreach and Support
- Food Pantry
- Wellness Coaching
- Alcohol and Other Drug Education

www.sfasu.edu/ethehub
936.468.4008
thehub@sfasu.edu

Crisis Resources:
- Burke 24-hour crisis line: 1.800.392.8343
- National Suicide Crisis Prevention: 9-8-8
- Suicide Prevention Lifeline: 1.800.273.TALK (8255)
- Crisis Text Line: Text HELLO to 741-741

Responsible Use of Technology

It is expected that all students will only use cell phones, PDAs, laptop computers, MP3 players and other technology outside of class time or when appropriate in class. Answering a cell phone, texting, listening to music or using a laptop computer for matters unrelated to the course may be grounds for dismissal from class or other penalties.

Social Justice Statement

This course and its instructors expect to maintain a positive learning environment based upon open communication, mutual respect, and non-discrimination. This class will be a safe haven for the thoughts and ideals of all students. Our University does not discriminate on the basis of race, color, religion, national origin, sex, age, disability, genetic information, citizenship, veteran status, sexual orientation, gender identity, and gender expression. Any suggestions as to how to further such a positive and open environment in this class will be appreciated and given serious consideration.

Acceptable Student Behavior

Classroom behavior should not interfere with the instructor’s ability to conduct the class or the ability of other students to learn from the instructional program. Unacceptable or disruptive behavior will not be tolerated. Students who disrupt the learning environment may be asked to leave class and may be subject to judicial, academic or other penalties. This prohibition applies to all instructional forums, including electronic, classroom, labs, discussion groups, field trips, etc. The instructor shall have full discretion over what behavior is appropriate/inappropriate in the classroom. Students who do not attend class regularly or who perform poorly on class projects/exams may be referred to the Early Alert Program. This program provides students with recommendations for resources or other assistance that is available to help SFA students succeed. Please read the complete policy at: http://www.sfasu.edu/policies/student-code-of-conduct_10.4.pdf

Tobacco-Free Policy: University Policy 13.21 states that campus is tobacco and vape free. This includes all tobacco and vape related products, and includes all activities during field labs! See: http://www.sfasu.edu/policies/13.21_smoking- vapping-and-use-of-tobacco-products.pdf

Firearms and Concealed Carry: University Policy 13.9 deals with firearms and the concealed carry policy. Students with concealed carry licenses that choose to carry on campus are required to follow all Texas laws and University policies and it is their responsibility to understand and comply accordingly. See: http://www.sfasu.edu/policies/13.9-Firearms- Explosives-and-Ammunition.pdf