TERM: Spring 2024
CLASS MEETING TIME AND PLACE: TBA
CREDIT: 3 semester hours

INSTRUCTOR: Dr. Sheryll B. Jerez, Professor
OFFICE: Room 119, Forestry Building
OFFICE HOURS: TR 9:15 – 11:15 AM, R 1:00 - 3:00 PM OR by APPT
PHONE: Office – 936.468.6614; Cell – 217.493.2716
EMAIL: jerezs@sfasu.edu

COURSE DESCRIPTION: This course will cover recent advances in the use of drones in air quality assessment and the potential of integrating artificial intelligence in drones for air quality applications

PROGRAM LEARNING OUTCOMES:

M.S. Environmental Science Program Learning Outcomes:

1. Demonstrate competency in environmental regulation and compliance;
2. Demonstrate understanding in environmental risk assessment;
3. Demonstrate understanding in occupational and environmental health;
4. Demonstrate competency in statistical methods and data management;
5. Demonstrate competency in oral and written communication skills;

M.S. Environmental Science Learning Outcomes

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<th>Proficiency Levels</th>
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<tr>
<th>Course</th>
<th>PLO 1 Environmental Regulation and Compliance</th>
<th>PLO2 Environmental Risk Assessment</th>
<th>PLO3 Occupational and Environmental Health</th>
<th>PLO4 Statistical Methods and Data Management</th>
<th>PLO5 Oral and Written Communication</th>
<th>PL06 M.S. Thesis Research</th>
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<tr>
<td>ENVR 5371</td>
<td>M</td>
<td>A</td>
<td>N/A</td>
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<td>N/A – Not Applicable</td>
<td>B-Basic</td>
<td>I-Intermediate</td>
<td>A-Advanced</td>
<td>M-Mastery</td>
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Definition of Rating Categories:

1. **N/A** – Not Applicable – course does not support the Program Learning Outcome.

2. **B** – Basic – course supports Program Learning Outcome by providing students with fundamental information, definitions, concepts, and lab activities relative to the expected outcomes.

3. **I** – Intermediate – course supports Program Learning Outcome by providing students with topic-specific information, concepts, applications, and lab activities that increase the students’ skills in making tactical implementation decisions relative to the expected outcomes.

4. **A** – Advanced – course supports Program Learning Outcome by providing students with transitional, high level topic-specific information, activities, and opportunities that enable the students to apply their critical thinking and tactical skills to resolved increasingly challenging strategic situations.

5. **M** – Mastery – course supports Program Learning Outcome by providing students with opportunities to independently apply tactical and strategic planning skills to successfully accomplish real-world, non-academic management objectives. Completes students’ preparedness for entry-level professional activity accomplishment.

**GENERAL EDUCATION CORE CURRICULUM OBJECTIVES:** NA

**STUDENT LEARNING OUTCOMES:**
Upon successfully completing this course, the student will learn about the advances in the use of drones in assessing air quality and the potential of integrating artificial intelligence in air quality monitoring.

**COURSE REQUIREMENTS AND GRADING:** The student will meet with the instructor every two weeks to discuss the progress of literature review. The student will submit a completed literature review (at least 10 pages long; this is 50% of the grade) and present a lecture (50% of the grade) on the subject matter. The literature review should cover recent advances in technology, future outlook, and pertinent laws and regulations.

**COURSE CALENDAR:** NA

**COURSE POLICIES ON:**

**ACADEMIC INTEGRITY:** 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.

**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).

**COURSE EVALUATIONS:** Course evaluations should be completed online. It is the student’s responsibility to log on to mySFA and complete the evaluation.

**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/thehub](www.sfasu.edu/thehub)
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)
- johCrisis Text Line: Text HELLO to 741-741