

## **Online AVSC 3333 Airports and the Environment**

Spring 2019

Texas A&M University - Central Texas

### **INSTRUCTOR AND CONTACT INFORMATION**

**Instructor:** Dr. Daniel Prather, A.A.E., CAM

**Office:** Online

**Phone:** 951.343.4924

**Email:** [dprather@tamuct.edu](mailto:dprather@tamuct.edu)

Canvas Inbox is preferred email.

### **Office Hours:**

Wednesday 11am CT to 2pm CT. Available by appointment as well.

### **Mode of instruction and course access:**

This course is 100% online and uses TAMUCT Canvas LMS at <https://tamuct.instructure.com> for delivery.

### **Student-instructor interaction:**

I will check Canvas email regularly. My goal will be to respond to emails within 48 hours, including weekends. I will also be engaging in discussions on a weekly basis. Feel free to contact me via email within Canvas. If you need to speak with me, feel free to contact me in my office at 951.343.4924.

### **UNILERT:**

Emergency Warning System for Texas A&M University – Central Texas

UNILERT is an emergency notification service that gives Texas A&M University-Central Texas the ability to communicate health and safety emergency information quickly via email, text message, and social media. All students are automatically enrolled in UNILERT through their myCT email account.

Connect at [Unilert](https://www.tamuct.edu/departments/security/unilert.php) [<https://www.tamuct.edu/departments/security/unilert.php>] to change where you receive your alerts or to opt out. By staying enrolled in UNILERT, university officials can quickly pass on safety-related information, regardless of your location.

### **COURSE INFORMATION**

**Course Overview and description:** Emphasis will be placed on the importance of environmental concerns in modern airports and their impact on the surrounding communities and ecosystems. Course will review FAA advisory circular topics including sustainability, solar alternative energy, environmental hazards and prevention of mishaps.

**Course Objective:** Gain an in-depth understanding of the environmental impacts of airport and the manner by which airports ensure sustainability, with emphasis on the triple-bottom line and EONS.

### **Student Learning Outcomes:**

- Describe the balance between airports and the surrounding ecosystem.
- Develop and justify a plan for involvement with the local community. Include a description of and plan for proactive communication.
- Periodically select an FAA AC related to environmental issues for presentation and class discussion.
- Research and collect data from an existing airport related to environmental issues. Analyze the data and develop a plan which incorporates environmental ecosystem improvement while maintaining business sustainability.

### **Required Reading and Textbook(s):**

Materials to be made available within the course include:

1. Guidebook for Incorporating Sustainability into Traditional Airport Projects, Airport Cooperative Research Program (ACRP) Report 80
2. Airport Sustainability Practices—Drivers and Outcomes for Small Commercial and General Aviation Airports, Airport Cooperative Research Program (ACRP) Synthesis 69
3. Federal Aviation Administration (FAA), AC 150/5050-8, Environmental Management Systems for Airport Sponsors, FAA, Washington, D.C., 2007 [Online]. Available: [http://www.faa.gov/documentLibrary/media/advisory\\_circular/150-5050/8/150\\_5050\\_8.pdf](http://www.faa.gov/documentLibrary/media/advisory_circular/150-5050/8/150_5050_8.pdf)
4. Thomson, B. and E. Delaney, ACRP Synthesis 53: Outcomes of Green Initiatives: Large Airport Experience, Transportation Research Board of the National Academies, Washington, D.C., 2014 [Online]. Available: [http://onlinepubs.trb.org/onlinepubs/acrp/acrp\\_syn\\_053.pdf](http://onlinepubs.trb.org/onlinepubs/acrp/acrp_syn_053.pdf).
5. 150/5200-33B - Hazardous Wildlife Attractants On or Near Airports

### **COURSE REQUIREMENTS**

Student Video Bio (100 points):	10%
Weekly Discussion (100 points each):	20%
Weekly Essay (100 points each):	20%
Weekly Quiz (100 points each):	20%
Course Paper (100 points):	<u>30%</u>

100%

## **Grading Criteria Rubric and Conversion**

### Student Video Bio

Students will record a ~1-2 minute video bio introducing themselves to the class. Tell us about your background, your interests, hobbies, and what brought you to this course. Using your webcam and computer microphone is sufficient for this assignment.

### Weekly Discussion

Students will participate in a weekly discussion and post your initial response of at least 200 words and then respond to at least two of your classmates, for a total of three posts. Three substantive post is worth 100%, two substantive posts is worth 66%, one substantive post is worth 33% and zero substantive posts is worth 0%.

### Weekly Essay

Each week, students will complete an essay assignment, which will consist of answering 2-5 questions in paragraph form. Please use APA formatting.

### Weekly Quiz

Each week, students will complete a brief quiz assessing learning on that week's content. These will be graded objectively and will contain multiple-choice and true/false items.

### Course Paper

Students will be required to write a course paper on an airport environmental topic of their choice, with instructor approval. To earn maximum credit, this paper must contain:

Well-developed topic, with introduction, literature review, findings, conclusion.

APA format

Headings

Page numbers

Title page

Abstract

References

At least three high-quality, scholarly references.

Double-space

Ten pages, not including title page, abstract, or references.

### **Posting of Grades**

- All student grades will be posted on the Canvas Grade book where you can monitor your status.
- Items will be graded as submitted, aligned with due dates, within five days.

## **COURSE OUTLINE AND CALENDAR**

### **Complete Course Calendar**

#### Unit 1: Overview

##### **Week 1: Introduction to Course, Canvas, Instructor, Syllabus**

Student Bio

##### **Week 2: Introduction to Airport Sustainability**

*Read Chapter 1: What is Sustainability? (Guidebook for Incorporating Sustainability into Traditional Airport Projects, Airport Cooperative Research Program (ACRP) Report 80*

*Quiz*

*Discussion*

#### Unit 2: Environmental Regulations, Compliance, Enforcement, EMS

##### **Week 3: Environmental Regulations**

*View Week 3 Environmental Regulations Powerpoint presentation.*

*Quiz*

*Discussion*

##### **Week 4: Environmental Compliance and Enforcement**

*View Week 4 Environmental Compliance and Enforcement Powerpoint presentation.*

*Quiz*

*Discussion*

##### **Week 5: Environmental Management System**

*Read AC 150/5050-8, Environmental Management Systems for Airport Sponsors.*

*Quiz*

*Discussion*

#### Unit 3: Sustainability

##### **Week 6: Economic Viability**

*Read Case Example 1, In-Kind Contributions from ACRP Synthesis 69.*

*Quiz*

*Discussion*

##### **Week 7: Operational Efficiency**

*Read Case Example 10, Photovoltaic Solar Field and Rotating Beacon, from ACRP Synthesis 69.*

*Read Case Example, Energy Efficiency that Pays for Itself, from ACRP Synthesis 53.*

*Quiz*

*Discussion*

**Week 8: Natural Resource Conservation**

Air quality enhancement/climate change

Energy conservation/renewable energy

*Read Case Example 3, Electric/Diesel Utility Vehicles and Terminal Retrofit from ACRP Synthesis 69.*

*Read Case Example 8, Airfield Lighting, from ACRP Synthesis 69.*

*Read Case Example 9, Photovoltaic Solar Field, from ACRP Synthesis 69.*

*Read Case Example, Addressing Climate Change and Selling Carbon Credits, from ACRP Synthesis 53.*

*Quiz*

*Discussion*

**Week 9: Natural Resource Conservation**

Noise abatement

Water quality protection

Water conservation

*Read Case Example 4, Efficient Lighting and Hardscape Installation, from ACRP Synthesis 69.*

*Read Case Example 11, Reclaimed Water, from ACRP Synthesis 69.*

*Read Case Example, State-of-the-Art Deicing Infrastructure, from ACRP Synthesis 53.*

*Quiz*

*Discussion*

**Week 10: Natural Resource Conservation**

Land and natural resources management

Land/property use

Pavement management

*Read Case Example 12, Sensitive Environment, from ACRP Synthesis 69.*

*Read Case Example 13, Honeybees, from ACRP Synthesis 69.*

*Read Case Example, Applying the Triple-Bottom-Line Thinking to Regional Development, from ACRP Synthesis 53.*

*Quiz*

*Discussion*

**Week 11: Natural Resource Conservation**

Materials use and solid waste reduction/recycling

Hazardous materials and waste management/reduction

Surface transportation management

Buildings/facilities

*Read Case Example 5, Multiple Measures, from ACRP Synthesis 69.*

*Read Case Example 6, LEED Equivalency, from ACRP Synthesis 69.*

*Read Case Example 14, Recycling, from ACRP Synthesis 69.*

*Read Case Example, LEED Platinum Headquarters, from, ACRP Synthesis 53.*

*Read Case Example, Multimodal Transportation Approach, from ACRP Synthesis 53.*

*Read Case Example, A Public Private Partnership Results in Reduced Greenhouse Gas Emissions, from ACRP Synthesis 53.*

*Read Case Example, Moving Toward a Community Goal of Zero Waste, from ACRP Synthesis 53.*

*Read Case Example, Getting a New Practice Off the Ground, ACRP Synthesis 53.*

*Quiz*

*Discussion*

**Week 12: Social Responsibility**

*Socioeconomic benefits and community outreach/involvement*

*Read Case Example 2, Statewide Sustainability Toolkit for General Aviation Airports, from ACRP Synthesis 69.*

*Read Case Example, Using The Global Reporting Initiative Framework, from ACRP Synthesis 53. Quiz*

*Discussion*

Unit 4: Compatibility

**Week 13: Compatible Land Use and Zoning**

*Read Chapter 1 of the Washington State DOT Airports and Compatible Land Use Guidebook.*

*Quiz*

*Discussion*

**Week 14: Hazardous Wildlife Attractants**

*Land use practices that potentially attract hazardous wildlife*

*Read AC 150/5200-33B, Hazardous Wildlife Attractants On or Near Airports.*

*Quiz*

*Discussion*

**Week 15: Hazardous Wildlife Attractants**

*Procedures for wildlife hazard management by public-use airports*

*View Week 15 Wildlife Powerpoint presentation.*

*Quiz*

*Discussion*

Unit 5: Review

**Week 16: Wrap-Up and Paper submission**

*Turn in Paper*

**INSTRUCTOR POLICIES**

All assignment should be completed as assign, with close adherence to due dates. Assignments not meeting minimum requirements will be penalized accordingly. Assignments will be penalized 10% for each day submitted past the due date, with the instructor reserving the right not to accept an assignment submitted more than three days late.

**Copyright Notice.**

Students should assume that all course material is copyrighted by the respective author(s).

Reproduction of course material is prohibited without consent by the author and/or course

instructor. Violation of copyright is against the law and Texas A&M University-Central Texas'

Code of Academic Honesty. All alleged violations will be reported to the Office of Student Conduct.

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## **TECHNOLOGY REQUIREMENTS AND SUPPORT**

### **Technology Requirements.**

Online courses require that you have a reliable internet connection. All of your coursework and exams will be assigned and submitted in an online environment.

To successfully complete an online course, you must have access to these minimum technology tools:

- Reliable Internet connection
- Desktop or Laptop computer with 2Gb RAM and 60Gb Hard drive space (4Gb RAM, 400Gb Hard drive is preferred)
- Windows Vista, 7, 8, or 8.1, or Mac OSX 10.7-10.9
- Internet Explorer 9 or 10, Firefox 4 or higher, Chrome 19 or higher, or Safari 4.0 (Macs only)
- Text Editor - MS Word, LibreOffice or OpenOffice
- Audio/Video Player
- Course-Recommended Plug-ins
- Course-Recommended Software

The above listing is for minimum requirements. You may check your computer's compatibility with Blackboard on the Blackboard login page. Your browser must have JavaScript enabled for you to access your courses properly. In addition, Blackboard will display popups with information, so popup blockers may need to be disabled. Some courses will require that you purchase additional software related to the course and your field of study.

This course will use the TAMUCT Instructure Canvas learning management system.

Logon to TAMUCT Canvas [<https://tamuct.instructure.com>]

Username: Your MyCT username

(xx123 or everything before the "@" in your MyCT e-mail address)

Password: Your MyCT password

### **Technology Support.**

For technology issues, students should contact Help Desk Central.

24 hours a day, 7 days a week:

Email: [helpdesk@tamu.edu](mailto:helpdesk@tamu.edu)

Phone: (254) 519-5466

[Web Chat](http://hdc.tamu.edu): <http://hdc.tamu.edu>

*When calling for support please let your support technician know you are a TAMUCT student.*

For issues related to course content and requirements, contact your instructor.

## **COURSE AND UNIVERSITY RESOURCES, PROCEDURES, AND POLICIES**

**Drop Policy.**

If you discover that you need to drop this class, you must complete a Drop Request Form, found through the [Registrar's web page](#):

<https://www.tamuct.edu/departments/business-office/droppolicy.php>

Professors cannot drop students; this is always the responsibility of the student. The Registrar's Office will provide a deadline on the University Calendar for which the form must be completed, signed and returned. Once you return the signed form to the Registrar's Office, you must go into Warrior Web and confirm that you are no longer enrolled. If you still show as enrolled, FOLLOW-UP with the Registrar's Office immediately. You are to attend class until the procedure is complete to avoid penalty for absence. Should you miss the drop deadline or fail to follow the procedure, you will receive an F in the course, which may affect your financial aid and/or VA educational benefits.

**Academic Integrity.**

Texas A&M University -Central Texas values the integrity of the academic enterprise and strives for the highest standards of academic conduct. A&M-Central Texas expects its students, faculty, and staff to support the adherence to high standards of personal and scholarly conduct to preserve the honor and integrity of the creative community. Academic integrity is defined as a commitment to honesty, trust, fairness, respect, and responsibility. Any deviation by students from this expectation may result in a failing grade for the assignment and potentially a failing grade for the course. Academic misconduct is any act that improperly affects a true and honest evaluation of a student's academic performance and includes, but is not limited to, cheating on an examination or other academic work, plagiarism and improper citation of sources, using another student's work, collusion, and the abuse of resource materials. All academic misconduct concerns will be reported to the university's Office of Student Conduct. Ignorance of the university's standards and expectations is never an excuse to act with a lack of integrity. When in doubt on collaboration, citation, or any issue, please contact your instructor before taking a course of action.

**Academic Accommodations.**

At Texas A&M-Central Texas, we value an inclusive learning environment where every student has an equal chance to succeed and has the right to a barrier free education. The Department of Access and Inclusion is responsible for ensuring that students with a disability receive equal access to the University's programs, services and activities. If you believe you have a disability requiring reasonable accommodations please contact the Department of Access and Inclusion at (254) 501-5831. Any information you provide is private and confidential and will be treated as such.

For more information please visit our [Access & Inclusion webpage](#):

<http://www.tamuct.edu/departments/access-inclusion>.

TAMUCT supports students who are pregnant and/or parenting. In accordance with requirements of Title IX and guidance from US Department of Education's Office of Civil Rights, the Dean of Student Affairs' Office can assist students who are pregnant and/or parenting in seeking accommodations related to pregnancy and/or parenting. For more information, please visit



<https://www.tamuct.departments/index.php>. Students may also contact the institution's Title IX Coordinator. If you would like to read more about these [requirements and guidelines](#), please visit: <http://www2.ed.gov/about/offices/list/ocr/docs/pregnancy.pdf>

### **Tutoring.**

Tutoring is available to all TAMUCT students, both on-campus and online. On-campus subjects tutored include Accounting, Advanced Math, Biology, Finance, Statistics, Mathematics, and Study Skills. Tutors are available at the Tutoring Center in Warrior Hall, Suite 111.

If you have a question regarding tutor schedules, need to schedule a tutoring session, are interested in becoming a tutor, or any other question, contact Academic Support Programs at 254-519-5796, or by emailing Kim Wood at [k.wood@tamuct.edu](mailto:k.wood@tamuct.edu).

Chat live with a tutor 24/7 for almost any subject on your computer! Tutor.com is an online tutoring platform that enables TAMUCT students to log-in and receive FREE online tutoring and writing support. This tool provides tutoring in over forty subject areas. Access Tutor.com through Canvas.

### **The University Writing Center.**

Located in 416 Warrior Hall, the University Writing Center (UWC) at Texas A&M University – Central Texas is a free workspace open to all TAMUCT students from 10am-4pm Monday-Thursday during the Summer semester (June 5, 2017 to July 27, 2017). Students may arrange a one-on-one session with a trained and experienced writing tutor by visiting the UWC during normal operating hours (both half-hour and hour sessions are available). Tutors are prepared to help writers of all levels and abilities at any stage of the writing process.

While tutors will not write, edit, or grade papers, they will assist students in developing more effective composing practices. By providing a practice audience for students' ideas and writing, our tutors highlight the ways in which they read and interpret students' texts, offering guidance and support throughout the various stages of the writing process. In addition, students may work independently in the UWC by checking out a laptop that runs the Microsoft Office suite and connects to WIFI, or by consulting our resources on writing, including all of the relevant style guides. Whether you need help brainstorming ideas, organizing an essay, proofreading, understanding proper citation practices, or just want a quiet place to work, the University Writing Center is here to help!

If you have any questions about the University Writing Center, please do not hesitate to contact Dr. Bruce Bowles Jr. at [bruce.bowles@tamuct.edu](mailto:bruce.bowles@tamuct.edu).

### **University Library.**

The University Library provides many services in support of research across campus and at a distance. We offer over 200 electronic databases containing approximately 250,000 eBooks and 82,000 journals, in addition to the 72,000 items in our print collection, which can be mailed to students who live more than 50 miles from campus. Research guides for each subject taught at TAMUCT are available through our website to help students navigate these resources. On-campus, the library offers technology including cameras, laptops, microphones, webcams, and digital sound recorders.

Research assistance from a librarian is also available twenty-four hours a day through our online chat service, and at the reference desk when the library is open. Research sessions can be scheduled for more comprehensive assistance, and may take place on Skype or in-person at the library. Assistance may cover many topics, including how to find articles in peer-reviewed journals, how to cite resources, and how to piece together research for written assignments.

Our 27,000-square-foot facility on the TAMUCT main campus includes student lounges, private study rooms, group work spaces, computer labs, family areas suitable for all ages, and many other features. Services such as interlibrary loan, TexShare, binding, and laminating are available. The library frequently offers workshops, tours, readings, and other events. For more information, please visit our [homepage](https://tamuct.libguides.com/): <https://tamuct.libguides.com/>