



TEXAS A&M UNIVERSITY
SAN ANTONIO

College of Business
Fire and Emergency Services Administration Program
FESA 4316 Developing Data Based Outcomes for Fire and Emergency Services
Spring 2024, CRN: 600_202420

Course Syllabus

Instructor: Jonathan McMahan

Tel: 979-820-0757; text will get quickest response.

E-Mail: jmcmahan@tamusa.edu
Student emails will receive a reply within 24 hours.

Course Website: <https://tamusa.blackboard.com/>

Office Hours: Text or email me and I will help you ASAP

Online Appt. can be scheduled as needed.

Course Website: <https://tamusa.blackboard.com/>

Office Hours: By appointment only. Send email or text

Catalog Course Description:

This course will provide information and tools that fire service personnel and other public service managers can use to develop and prepare their agency to evaluate performance activities.

The course will introduce the student to the self-assessment and accreditation processes as developed by the Center for Public Safety Excellence (CPSE) and their accreditation programs administered by the Commission on Fire Accreditation International (CFAI) and the Commission on Professional Credentialing (CPC). The course will introduce students to basic analysis techniques using Microsoft Excel. Students will learn how to evaluate fire service data, develop recommendations, and identify needs and trends.

Course Objectives:

1. Discuss the uses of analytical approaches to rational decision making.
2. Differentiate techniques of analysis.
3. Select appropriate analytic tools to support critical thinking.
4. Discuss how the use of databases, histograms, inferential statistics and probabilities and

GIS are used in fire station location planning.

5. Explain the benefits of self-assessment and, ultimately, accreditation.

6. Define the planning requirements for self-assessment.

7. Explain a process that allows agencies to determine their level of service performance in a consistent manner.

8. Define methods agencies can use to determine the levels of service appropriate for its responsibilities and risks.

9. Define the purpose of developing a Standards of Response Coverage report.

10. Reviews the CFAI definition of the planning requirements to be considered in the self-assessment process.

Prerequisites:

None

Student Learning Outcomes:

After completion of the course, students will understand the importance of data-driven decision making based on principles derived from the CFAI accreditation model, ISO standards, and Texas Fire Chief's Association Best Practices program.

Required Materials: Textbook:

Quality Improvement for the Fire and Emergency Services

Order from CPSE bookstore

Link to Store:

<https://cpse.users.membersuite.com/shop/store/browse>

Link to actual book:

<https://cpse.users.membersuite.com/shop/store/b2a5c366-00ce-c304-d848-fa37699e3d7c/detail>

Other Recommended / Reading Materials: Additional reading materials provided weekly on the course website.

Course Requirements every student must fulfill in order to succeed in course:

1. Students should check the Course Calendar, Announcements, and Messages (e-mail) systems in Blackboard on a regular basis.
2. Students should keep current with all course assignments, quizzes, and examinations.
3. Students should ask questions and communicate with the instructor either in class, online, off-line or during office hours.
4. For all classwork, exams, quizzes etc., if a student is completing it off-campus, then they are responsible for availability of internet connectivity. Extensions will not be granted for lack of availability of internet connections.
5. Students should remember that hybrid and online courses assume greater responsibility and independent learning skills by the student for their own learning outcomes.
6. For online-asynchronous courses, students should keep current on class recordings. For online-synchronous courses, students are expected to attend virtually during the class meeting time.

Grading Policy: The final course grade will be based on your performance on the quizzes, exams, assignments and class participation using the following weights:

Attendance

10%

Assignments	30%
Class Participation (do all your work)	15%
Final Exam (as per University Schedule)	20%
Research Papers	25%
Total	100%

The final letter grades will be assigned as follows: Above 90% \Rightarrow A; 80 – 89% \Rightarrow B; 70 – 79% \Rightarrow C; 60 – 69% \Rightarrow D; Below 60% \Rightarrow F.

This course has a requirement of a grade of C as a minimal grade for satisfactory completion of this course

Examinations and Quizzes: There will be a mandatory mid-term exam and a mandatory final exam (as per university schedule). Missing an exam will result in a grade of zero for that exam and may result in a fail grade in the course. The exams/quizzes will consist of conceptual multiple-choice questions, problem solving questions, and short essay questions. The exam/quiz materials will come from lecture notes, the text, and class discussions. Questions will emphasize understanding and applications of concepts and topics covered in class.

Proctored Exams: In order to ensure course integrity, students enrolled in this course may use a Remote test-Proctoring software for the administration of exams, if allowed and is set up by the instructor.

Assignments/ Research papers: There will be several assignments and Projects during the course. Individual assignment statements and due dates will be posted through Blackboard. For all assignment and quiz problems, ALL intermediate work of the problem solution steps MUST be shown. This includes the use of the formula, the values substituted in the formulas for problem solution, as well the intermediate steps of the arithmetic computation. The units of measurement are extremely important and MUST be shown at each stage of the computation. Considerable points will be taken off for not following these requirements.

Online individual / Group Activities:

Make up and Late Assignment/exam/quiz policy:

As a general rule, make-ups or late submissions will NOT be offered or accepted for any missed assignments/exams/quizzes. Late submissions or make-ups may be accepted/administered only in extraordinary circumstances such as an excused official university activity, a severe illness, or a dire emergency. However, you must provide comprehensive documentation either before or within a few days of the missed assignment/quiz/exam.

Class conduct and civility code: Everyone in class is expected to follow all rules in the student handbook, as well as common courtesy during classroom lectures and discussions in class and online, including the following:

1. Attendance may be taken at the beginning or the end of the class.
2. It is the students' responsibility to obtain and be able to use the required materials and software for this class.
3. Student must retain copies of all assignments and graded work for verification purposes and provide it to the instructor, if necessary. Keep own copies of all computer files and e-mails till final grade is received.

4. Talking while the instructor is lecturing is extremely disruptive and discourteous to the instructor and other students.
5. Using computers or phones (except for a valid urgent need) during class for a purpose not related to class is disruptive. All cell phones and gadgets should be turned OFF and headphones removed.
6. For any questions about the exams and assignments, a student should contact the instructor, well in advance of the day they are due, so the instructor may have enough time to provide feedback.
7. All communications will be via e-mail communications to the Texas A&M University e-mail account, and students are expected to use their school provided email account. The instructor will reply to a student e-mail messages and voice messages within 2 business days (Monday-Friday).
8. All assignment submissions must be uploaded to Blackboard by the due date and time. Submission window may close or marked late, even if late by one second.

Anyone violating these policies may be subject to disciplinary actions.

Class attendance and Participation:

Spring 2024 Class Schedule

The provisions and information set forth in the schedule below are intended to be informational and not contractual in nature. The instructor reserves the right to amend, alter, change, delete or modify the provisions of the schedule.

Week	Date		Chapters
Week 1	1/17	1/21	Get textbook; Introductions in discussion question
Week 2	1/22	1/28	Read textbook each week; Complete survey
Week 3	1/29	2/4	Read weekly content; Discussion # 3
Week 4	2/5	2/11	Read, start mid-term assignment, Discussion # 4
Week 5	2/12	2/18	Read, discussion # 5
Week 6	2/19	2/25	Read book; work on mid-term assignment
Week 7	2/26	3/3	Mid-term test over book or a written paper; TBD
Week 8	3/4	3/10	Turn in mid-term project
Week 9	3/11	3/17	Review weekly course info; Discussion question
Week 10	3/18	3/24	Review weekly course info; Discussion question
Week 11	3/25	3/31	Review weekly course info; Discussion question
Week 12	4/1	4/7	Case Study on TFCA Best Practices
Week 13	4/8	4/14	Case study on ISO; Assign Final Project
Week 14	4/15	4/21	Start working on final project
Week 15	4/22	4/28	Turn in Rough Draft for Final Project
Week 16	4/29	5/5	Turn in final project

Academic Integrity Statement- Use of AI generated material (ChatGPT, etc.)

In all academic work, the ideas and contributions of others must be appropriately acknowledged and work that is presented as original must be, in fact, original. Using an AI-content generator (such as ChatGPT) to complete coursework without proper attribution or authorization is a form of academic dishonesty. If you are unsure about whether something may be plagiarism or academic dishonesty, please contact your instructor to discuss the issue. Faculty, students, and administrative staff all share the responsibility of ensuring the honesty and fairness of the intellectual environment.

IMPORTANT POLICIES AND RESOURCES

Academic Accommodations for Persons with Disabilities: Texas A&M University-San Antonio is committed to providing all students with reasonable access to learning opportunities and accommodations in accordance with The Americans with Disabilities Act, as amended, and Section 504 of the Rehabilitation Act. If you experience barriers to your education due to a disability or think you may have a disability, please contact Disability Support Services in the Central Academic Building, Suite 210, or at (210) 784-1335 or visit <https://www.tamusa.edu/index.html> or email us at dss@tamusa.edu. Disabilities may include, but are not limited to, attentional, learning, mental health, sensory, physical, or chronic health conditions. All students are encouraged to discuss their disability-related needs with Disability Support Services and their instructors as soon as possible.

Academic Learning Center: The Academic Learning Center provides free course-based tutoring to all currently enrolled students at Texas A&M University-San Antonio. Students wishing to work with a tutor can make appointments through the Brainfuse online tutoring platform. Brainfuse can be accessed in the *Tools* section of Blackboard. You can contact the Academic Learning Center by emailing tutoring@tamusa.edu, calling (210) 784-1307, or visiting the Central Academic Building, room 202.

Counseling/Mental Health Resources: As a college student, there may be times when personal stressors interfere with your academic performance and/or negatively impact your daily functioning. If you are experiencing emotional difficulties or mental health concerns, support is available to you through the Student Counseling Center (SCC). To schedule an appointment call 210-784-1331 or visit Modular C, Room 166 (Rear entrance).

All mental health services provided by the SCC are free and confidential (as the law allows). The Student Counseling Center provides brief individual and group therapy, crisis intervention, consultation, case management, and prevention services.

Crisis support is available 24/7 by calling the SCC at 210-784-1331 (after-hours select option '2'). For more information and self-help resources, please visit www.tamusa.edu/studentcounseling

Emergency Preparedness: JagE Alert is Texas A&M University-San Antonio's mass notification. In the event of an emergency, such as inclement weather, students, staff and faculty, who are registered, will have the option to receive a text message, email with instructions and updates. To register or update your information visit: <https://tamusa.bbcportal.com/>.

More information about Emergency Operations Plan and the Emergency Action Plan can be found here: <https://www.tamusa.edu/about-us/campus-information/safety/university-police-department/documents/emergency-operations-plan.pdf> and <https://www.tamusa.edu/about-us/campus-information/safety/university-police-department/documents/emergency-action-plan.pdf>

Download the SafeZone App for emergencies or call (210) 784-1911. Non-Emergency (210) 784-1900

Financial Aid and Verification of Attendance: According to the following federal regulation, 34 CFR 668.21: U.S. Department of Education (DoE) Title IV regulation, a student can only receive Title IV funds based on Title IV eligibility criteria which include class attendance. If Title IV funds are disbursed to ineligible students (including students who fail to begin attendance), the institution must return these funds to the U.S. DoE within 30 days of becoming aware that the student will not or has not begun attendance. Faculty will provide the Office of Financial Aid with an electronic notification if a student has not attended the first week of class. Any student receiving federal financial aid who does not attend the first week of class will have their aid terminated and returned to the DoE. Please note that any student who stops attending at any time during the semester may also need to return a portion of their federal aid.

Writing, Language, and Digital Composing Center: The Writing, Language, and Digital Composing Center supports graduate and undergraduate students in all three colleges as well as faculty and staff. Tutors work with students to develop reading skills, prepare oral presentations, and plan, draft, and revise their written assignments. Our language tutors support students enrolled in Spanish courses and students composing in Spanish for any assignment. Our digital studio tutors support students working on digital projects such as eportfolios, class presentations, or other digital multimedia projects. Students can schedule appointments through JagWire under the Student Services tab. Click on “Writing, Language, and Digital Composing Center” to make your appointment. The Center offers face-to-face, synchronous online, and asynchronous digital appointments. More information about what services we offer, how to make an appointment, and how to access your appointment can be found on our website at <https://bit.ly/WLDCCenter>.

Meeting Basic Needs: Any student who has difficulty affording groceries or accessing sufficient food to eat every day, or who lacks a safe and stable place to live, and believes this may affect their performance in the course, is urged to contact the Dean of Students (DOS@tamusa.edu) for support. Furthermore, please notify the professor if you are comfortable in doing so. This will enable them to provide any resources they may possess.

Military Affairs: Veterans and active-duty military personnel are welcomed and encouraged to communicate, in advance if possible, and special circumstances (e.g., upcoming deployment, drill requirements, disability accommodations). You are also encouraged to visit the Patriots’ Casa in-person room 202, or to contact the Office of Military Affairs with any questions at military.va@tamusa.edu or (210)784-1397.

Religious Observances: Texas A&M University-San Antonio recognizes the diversity of faiths represented among the campus community and protects the rights of students, faculty, and staff to observe religious holidays according to their tradition. Under the policy, students are provided an opportunity to make up any examination, study, or work requirements that may be missed due to a religious observance provided they notify their instructors before the end of the second week of classes for regular session classes.

The Six-Drop Rule: Students are subject to the requirements of Senate Bill (SB) 1231 passed by the Texas Legislature in 2007. SB 1231 limits students to a maximum of six (6) non-punitive course drops (i.e., courses a student chooses to drop) during their undergraduate careers. A non-punitive drop does not affect the student's GPA. However, course drops that exceed the maximum allowed by SB 1231 will be treated as "F" grades and will impact the student's GPA.

Statement of Harassment and Discrimination: Texas A&M University-San Antonio is committed to the fundamental principles of academic freedom, equality of opportunity and human dignity. To fulfill its multiple missions as an institution of higher learning, A&M-San Antonio encourages a climate that values and nurtures collegiality and the uniqueness of the individual within our state, nation, and world. All decisions and actions involving students and employees should be based on applicable law and individual merit. Texas A&M University-San Antonio, in accordance with applicable federal and state law, prohibits discrimination, including harassment, on the basis of race, color, sex, religion, national origin, age, disability, genetic information, veteran status, sexual orientation, gender identity, gender expression, or pregnancy/parenting status. Individuals who believe they have experienced harassment or discrimination prohibited by this statement are encouraged to contact the appropriate offices within their respective units.

Texas A&M University-San Antonio faculty are committed to providing a safe learning environment for all students and for the university as a whole. If you have experienced any form of sex- or gender-based discrimination or harassment, including sexual assault, sexual harassment, domestic or dating violence, or stalking, know that help and support are available. A&M-San Antonio's Title IX Coordinator can support those impacted by such conduct in navigating campus life, accessing health and counseling services, providing academic and housing accommodations, and more. The university strongly encourages all students to report any such incidents to the Title IX Coordinator. Please be aware that all A&M-San Antonio employees (other than those designated as confidential resources such as counselors and trained victim advocates) are required to report information about such discrimination and harassment to the university. This means that if you tell a faculty member about a situation of sexual harassment or sexual violence, or other related misconduct, the faculty member must share that information with the university's Title IX Coordinator (titleix@tamusa.edu, 210-784-2061, CAB 439K). If you wish to speak to a confidential employee who does not have this reporting requirement, you can contact the Student Counseling Center at (210) 784-1331 or visit them in Madla 120.

Pregnant/Parenting Students: Texas A&M-San Antonio does not require a pregnant or parenting student, solely because of that status or issues related to that status, to (1) take a leave of absence or withdraw from their degree or certificate program; (2) limit the student's studies; (3) participate in an alternative program; (4) change the student's major, degree, or certificate program; or (5) refrain from joining or cease participating in any course, activity, or program at the University. The university will provide reasonable accommodations to pregnant students that would be provided to a student with a temporary medical condition and that are related to the health and safety of the student and the student's unborn child. These could include maintaining a safe distance from substances, areas, and activities known to be hazardous to pregnant individuals and their unborn child; excused absences because of illness or medical appointments; modified due dates for assignments; rescheduled tests/exams; taking a leave of absence; and being provided access to instructional materials and

video recordings of lectures for excused absences, if these would be provided to any other student with an excused absence. Pregnant/parenting students are encouraged to contact the Title IX Coordinator with any questions or concerns related to their status (titleix@tamusa.edu; 210-784-2061; CAB 439K).

Texas A&M-San Antonio has also designated the Title IX Coordinator as the liaison officer for current or incoming students who are the parent or guardian of a child younger than 18 years of age. The Title IX Coordinator can provide students with information regarding support services and other resources.

Students' Rights and Responsibilities: The following statement of students' rights and responsibilities is intended to reflect the philosophical base upon which University Student Rules are built. This philosophy acknowledges the existence of both rights and responsibilities, which is inherent to an individual not only as a student at Texas A&M University-San Antonio but also as a citizen of this country.

Students' Rights

1. A student shall have the right to participate in a free exchange of ideas, and there shall be no University rule or administrative rule that in any way abridges the rights of freedom of speech, expression, petition and peaceful assembly as set forth in the U.S. Constitution.
2. Each student shall have the right to participate in all areas and activities of the University, free from any form of discrimination, including harassment, on the basis of race, color, national or ethnic origin, religion, sex, disability, age, sexual orientation, or veteran status in accordance with applicable federal and state laws.
3. A student has the right to personal privacy except as otherwise provided by law, and this will be observed by students and University authorities alike.
4. Each student subject to disciplinary action arising from violations of university student rules shall be assured a fundamentally fair process.

Students' Responsibilities

1. A student has the responsibility to respect the rights and property of others, including other students, the faculty and administration.
2. A student has the responsibility to be fully acquainted with the published University Student Rules found in the Student Handbook, Student Code of Conduct, on our website, University Catalog and to comply with them, as well as federal, state, and local laws.
3. A student has the responsibility to recognize that student actions reflect upon the individuals involved and upon the entire University community.
4. A student has the responsibility to recognize the University's obligation to provide an environment for learning.

- A student has the responsibility to check their university email for any updates or official university notification.

We expect that students 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.

Students are expected to exhibit a high level of honesty and integrity in their pursuit of higher education. Students engaging in an act that violates the standards of academic integrity will find themselves facing academic and/or disciplinary sanctions. Academic misconduct is any act, or attempt, which gives an unfair advantage to the student. Additionally, any behavior specifically prohibited by a faculty member in the course syllabus or class discussion may be considered as academic misconduct. For more information on academic misconduct policies and procedures please review the [Student Code of Conduct](#).

Key Dates for Spring 2024

The complete academic calendar is available online:

<https://catalog.tamusa.edu/undergraduate/academic-calendar/>

January 9	Tuesday	Tuition & Fee payment deadline
January 11	Thursday	Drop for non-payment
January 12	Friday	Last day for students withdrawing to receive 100% refund and responsible for 0% of tuition
January 15	Monday	Martin Luther King Day. A&M-SA closed
January 16	Tuesday	First class day
January 23	Wednesday	Last day to register for Spring 16-week Session
January 31	Wednesday	Last day for students to apply for Spring 2024 graduation
January 31	Wednesday	Deadline for students who have applied for Spring 2024 graduation to complete Change of Name and/or Change of Major form(s) at the Welcome Center
January 31	Wednesday	Census Date
February 1	Thursday	Drop for non-payment
February 14	Wednesday	Spring 2024 Graduation Application Fee payment deadline
February 26-March 8	Monday-Friday	Midterm grading period
March 11-17	Monday-Sunday	Spring Break - no classes
March 29	Friday	Study day - No classes
April 13	Saturday	Last day to drop with an automatic "W"
April 20	Saturday	Last day to withdraw from the university
April 29	Monday	Last day of scheduled classes
April 30	Tuesday	Study day - no classes
May 1-7	Wednesday-Tuesday	Final examinations

May 7 Tuesday End of Spring Semester
May 13 Monday All grades for Spring 16-week session due by noon via Jagwire
May 13 Monday Spring Commencement
May 16 Thursday Grades available in JagWire