San José State University
Lucas Graduate School of Business
Master of Science in Transportation Management
MTM 226C: Transportation Safety & Compliance Management
Fall-B 2025

Course and Instructor Contact Information

Instructor:	Louis J. Brown, Jr. PE WSO CSSD PTSCTP
Email:	Louis.Brown@sjsu.edu
Office Hours:	2:00 – 5:00pm, M-F
Class Day/Time:	[Wednesday], 5:30 – 9:30 pm, for 10 weeks thru 12/17
Classroom:	Online (Zoom)
Course website:	Canvas (http://sjsu.instructure.com)

Course Format

Students must have regular access to email and the internet in order to communicate with the instructor, submit assignments, and engage in other class activities.

Students attend class sessions online using Zoom, SJSU's online meeting application. During classes, students should:

- Be in a quiet room without distractions (e.g., no family members or colleagues walking through or asking questions)
- Have stable internet access
- Use a **video camera and good quality microphone** so that you are seen as well as heard
- Follow good "meeting etiquette" principles (one such list: https://www.goto.com/blog/7-rules-virtual-meeting-etiquette-every-professional-know)

To access class sessions by Zoom, click on the following link from your computer or tablet [link provided in the course Canvas site]

Plan to join at least ten minutes before 5:30 pm, to make sure you are ready when class begins. (The very first time you join from a computer or device, allow extra time for set-up.)

The university has many useful tutorials on how to use Zoom here: https://www.sjsu.edu/cfeti/software/video-creative/zoom/index.php

Faculty Web Page and MYSJSU Messaging

Course materials such as syllabus, handouts, notes, assignment instructions, etc. can be found on the Canvas Leaning Management System course login website at http://sjsu.instructure.com. You are responsible for regularly checking with the messaging system through MySJSU at http://my.sjsu.edu (or other communication system as indicated by the instructor) to learn of any updates.

Course Description

Examines contemporary challenges to transportation safety and regulatory compliance. Topics to be covered include the history and evolution of safety principles, developing and managing a safety culture, hazard identification and management, along with federal and state regulatory compliance and safety certification processes. Students will also be introduced to the federal rulemaking process and the role of the National Transportation Safety Board.

MSTM Program Learning Goals:

(*Note:* Not all program learning goals are covered in every course)

Goal 1: **Transportation Systems and Society:** Craft management decisions that integrate knowledge of multi-modal transportation, social, and environmental systems

Goal 2: **Innovation:** Develop innovative solutions to transportation management challenges

Goal 3: **Leadership:** Develop high-impact leadership styles and competencies (traits, skills, behaviors)

Goal 4: **Communications:** Communicate effectively with a diverse workforce and citizenry

Goal 5: **Analytical skills:** Identify and evaluate transportation management issues using appropriate data and methods

Course Learning Outcomes (CLO)

Upon successful completion of this course, students will be able to:

CLO1. Identify the relevant federal regulations that apply to a safety situation
CLO2. Identify safety management best practices appropriate to a specific safety concern
CLO3. Assess whether a Transportation Safety Plan complies with federal regulations and incorporates best practices
CLO4. Advocate within an organization for upholding the highest safety principles
CLO5. Manage interactions with stakeholders, including internal personnel, police, and media

Required Texts/Readings

Textbook: Sidney Dekker, *Foundations of Safety Science: A Century of Understanding Accidents and Disasters* (Routledge, 2019). ISBN 9781138481787. The book, which costs $45.56 (paperback), can be purchased from Routledge.

Library Liaison

The Library Liaison for the Lucas Graduate School of Business is Christa Bailey (christa.bailey@sjsu.edu).

Course Requirements and Assignments

This course requirements and assignments conforms to the details found from University Syllabus Policy S16-9 at http://www.sjsu.edu/senate/docs/S16-9.pdf.

The following table outlines all required and graded course work. Additional details will be provided during class and in Canvas.

Activity	Due Date	Points	CLO Addressed
1. Hazard Assessment Paper A paper of 1,500 to 2,000 words that identifies and assesses hazards using current Military Standards (Submit paper thru Canvas)	29-Oct	20	1,2
2. Federal Register Commentary A memo of 1,500 to 2,000 words, prepared in the format required for submission to the Federal Register to participate in the rule-making process. (Submit memo thru Canvas)	19-Nov	20	1,5
3. Case Presentation Create and be prepared to give a 15-minute presentation on an incident or accident significant enough to result in the development of new regulations or changes in policies or recommendations set forth by the National Transportation Safety Board (Submit slides thru Canvas)	5-Nov, 12-Nov, 3-Dec, 10-Dec	12	1.2.5
4. Safety Plan Critique Working in teams of 3 to 4 students, prepare a report 1,500 to 2,000 words and presentation, that evaluates an organization's safety plan for compliance with federal regulations and identify opportunities to improve the plan (Submit critique and presentation thru Canvas)	17-Dec	30	1,3
5. Weekly Discussion Posts Write a 300 to 400-word reflection upon readings that will be discussed in the upcoming class. A specific prompt will be given for each week's post. (Submit discussion posts thru Canvas)	15-Oct thru 10-Dec	18	All

Final Examination or Evaluation The culminating experience for the course takes place during the Week 10 class session. Students will prepare for and participate in a mock regulatory hearing of the National Transportation Safety Board (NTSB).

Grading Information

Course activities will be worth the points listed above and graded as follows:

Assignments 1, 2, 3, and 4 will be graded according to evaluation rubrics provided in Canvas. For each three days (72 hours) an assignment is late, the grade will be lowered by one-third of a grade (i.e., from an A- to a B+). Work will be accepted up until 2 days after the last class meeting. Any work not submitted by that time will receive zero credit.

For Assignment 5, the discussion posts will be graded credit/no credit. Posts submitted on time and of reasonable quality will receive full credit (3 points). Posts received late or of very poor quality receive no credit. You must turn in at least 6 memos, with a maximum of 18 points allocated for the discussion posts.

The final course grade will be calculated by adding up all points earned on class activities and assigning a letter grade as shown in the table below. Extra credit is not available in this course.

Determination of Grades

- A statement of how grades will be determined for the course, including +/- grades if they are used.
- Extra credit options, if available.
- List of the percentage weight assigned to various class assignments.
- Penalty (if any) for late or missed work.

One Sample Letter grade calculation. Please change it as required.

Percentage	Grade
94% and above	A
93% to 90%	A-
89% to 87%	B+
86% to 84%	B
83% to 80%	B-
79% to 77%	C+
76% to 73%	C
72% to 70%	C-
69% to 67%	D+
66% to 63%	D
62% to 60%	D-
below 60%	**F**

University Policies

Per University Policy S16-9, relevant university policy concerning all courses, such as student responsibilities, academic integrity, accommodations, dropping and adding, consent for recording of class, etc. and available student services (e.g. learning assistance, counseling, and other resources) are listed on this Syllabus Information web page. Make sure to visit this page to review and be aware of these university policies and resources.

Use of Generative AI

According to the San Jose State University's Academic Integrity Policy (that includes Definitions of Academic Dishonesty), plagiarism is the appropriation of another person's ideas, processes, results or words without

giving appropriate credit (aggiehonor.tamu.edu). You should credit your use of anyone else's words, graphic images, or ideas using standard citation styles. Artificial Intelligence (AI) text generators and natural language processing tools (colloquially, chatbots - such as ChatGPT), audio, computer code, video, and image generators should not be used for any work for this class without explicit permission of the instructor and appropriate attribution. This includes, but is not limited to,

i. Creating or revising drafts
ii. Editing your work
iii. Reviewing a peer's work

This excludes pre-existing software additions such as spelling and grammar checkers, which are acceptable.

Course Schedule

Note: This schedule is subject to change with fair notice. Students will be informed of changes either in class, via email, or via Canvas notifications

Date	Class Activities this week	Readings for following week	Assignments for following week*
Oct 8	Student Self Introductions (< 5 min each)	Department Of Defense Military Standard 882E MIL-STD-882 E SYSTEM SAFETY (everyspec.com)	Provide a short story (300 – 400 words) of a Personal Experience with Transportation Safety
Oct 15	Review short stories (300 – 400 words) of a Personal Experience with Transportation Safety (Discussion with classmates this evening)	Dekker, Chapters 2-6, Hazard Identification and Management Possible Guest speaker: Ed Watt, How to Supercharge Your Career, Connect with Mentors, And Collaborate with Leading Transportation Researchers!	Provide a short story (300 – 400 words) about what you would/ could/should do if you observe a safety issue in your workplace. How would you go about communicating to someone the need (if any) to identify, improve, or eliminate what you observed? (For discussion with classmates during class during Week Three)
Oct 22	Review short stories (300 – 400 words) about what you would/could/should do if you observe a safety issue in your workplace. How would you go about communicating to someone the need (if any) to identify, improve, or eliminate what you observed?	Selections from the Code of Federal Regulations: Title 14 and Title 49 Possible Guest speaker: Rebecca Frankhouser, CSO, King County Metro, Seattle WA – Safety Risk Management	Provide a short story (300 – 400 words) about a transportation safety regulation and describe how it began and what hazard is it mitigating. (For discussion with classmates during class during Week Four) Reminder, Hazard Assessment Paper of 1,500 to 2,000 words due Oct 29th. Be prepared to give summary of Hazard Assessment paper during class next week.
Oct 29	Review short stories (300 – 400 words) about a transportation safety regulation and describe how it began and what hazard is it mitigating. (For discussion with classmates during class this evening)	Selected NTSB Investigations	Provide a short story (300 – 400 words) about an NTSB Investigation resulting in an NTSB Safety Recommendation(s). Discuss the Probable Cause(s) for the accident and provide a status update for the Safety Recommendation from this accident. (For discussion with classmates during class during Week Five)
Nov 5	Review short stories (300 – 400 words) about an NTSB Investigation resulting in an NTSB Safety Recommendation(s). (For discussion with classmates during class this evening)	Review all USDOT publications from the Federal Register on or before November 4th Possible Guest Speaker: Aaron Vogel, Chief Operating Officer,	Provide a short story (300 – 400 words) about a USDOT agency Federal Register posting published on or before November 9th. Describe the difference between a Rule, a Proposed Rule, and a Notice. Include an explanation of a Notice from one of those USDOT agencies. (For discussion with classmates during class during Week Six).

Date	Class Activities this week	Readings for following week	Assignments for following week*
		IndyGo Transit – NTSB Battery Electric Bus Fires	Also, NTSB Case Review Presentations (submitted and 2-3 to be presented)
Nov 12	Review short stories (300 – 400 words) about a USDOT agency Federal Register posting published on or before November 9th . Describe the difference between a Rule, a Proposed Rule, and a Notice. Include an explanation of a Notice from one of those USDOT agencies. NTSB Case Review Presentations (submitted and 2-3 to be presented)	Dekker, chapters 7 – 11 Possible Guest speakers: Dave Schlesinger, Cordoba Corp; Larry Day, TSI will present Transport Case Studies	Provide a short story (300 – 400 words) about Safety Culture in Transportation. What are the necessary components of a good safety culture? Include a description of the safety culture you've observed in your own organization. Also, NTSB Case Review Presentations (submitted and 2-3 to be presented). Reminder, Federal register commentary memo of 1,500 to 2,000 words due Nov 19th. Be prepared to give summary of memo during class next week.
Nov 19	Review short stories (300 – 400 words) about Safety Culture in Transportation. What are the necessary components of a good safety culture? Include a description of the safety culture you've observed in your own organization. Share summary of Federal register commentary memo of 1,500 to 2,000	Review Transportation agency safety plans (WMATA, Phoenix, Placer County & Tahoe Truckee Regional Area Transit – links to be provided) Possible Guest speaker: Timothy Lesniak, Chief Safety Officer, MBTA will discuss Safety Culture	Provide a short story (300 – 400 words) about how the FTA's Public Transit Agency Safety Plan is being implemented in your place of employment. Briefly discuss the difference in requirements for Rail Only, Rail and Bus, and Bus Only Transit agencies. Also, NTSB Case Review Presentations (submitted and 2-3 to be presented).
Dec 3	Review short stories (300 – 400 words) about how the FTA's Public Transit Agency Safety Plan is being implemented in your place of employment. Briefly discuss the difference in requirements for Rail Only, Rail and Bus, and Bus Only Transit agencies. NTSB Case Review Presentations (submitted and 2-3 to be presented)	Research the Internet for any information that we can use to hold our NTSB Mock Public Hearing on topic to be decided by fellow students. Be prepared to discuss during Dec 10th class. Possible Guest Speaker: Michael J. Smith, Chief Safety & Emergency Management Officer, New Orleans Regional Transit Authority – Federal Safety Program Requirements and Safety Management Initiatives	Provide a short story (300 – 400 words) about any of the previous discussion posts you may have missed submitting. No discussion post needed if you've already submitted the required 6 assignments. NTSB Case Review Presentations (submitted and 2-3 to be presented) if you have not already submitted the required 6 presentations.

Date	Class Activities this week	Readings for following week	Assignments for following week*
Dec 10	Review short stories (300 – 400 words) about any of the previous discussion posts you may have missed submitting for students needing their 6th weekly discussion post submittal. NTSB Case Review Presentations	Group reading assignments for NTSB Mock Hearing. Research the Internet for any information that we can use to hold our NTSB Mock Public Hearing	Working in teams of 2 to 3 students, prepare a report 1,500 to 2,000 words and summary presentation, that evaluates an organization's safety plan for compliance with federal regulations and identify opportunities to improve the plan Give critique presentation during class next week. Prepare for Mock NTSB Hearing.
Dec 17	In assigned teams, provide a 20-minute presentation of your findings from the 1500–2000-word report that evaluates an organization's safety plan for compliance with federal regulations and identify opportunities to improve the plan. Hold our NTSB Mock Public Hearing on topic to be decided by fellow students.		

* For discussion with classmates during class next week – also upload to Canvas Assignments