San José State University Lucas Graduate School of Business

Master of Science in Transportation Management

MTM226A Emergency Management Issues for Transportation Professionals

Spring-A 2018

Course and Instructor Contact Information

Instructor: Frannie Edwards

Office Location: 447 Clark Hall

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Office Hours: Mondays 10:30 am – noon and 4-5:40 pm

Class Day/Time: Wednesday, 5:30 – 9:30 pm, on January 3 through

March 7

Classroom: MTI Conference Room, 210 N. 4th Street, San Jose, 4th floor

(For locations, contact Ms. Viviann Feria at viviann.ferea@sjsu.edu)

Course Format

Students attend class sessions via live video conferencing at the site most convenient to them, with sites at the Mineta Transportation Institute, Caltrans District headquarters, and other participating agencies.

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.

Course Description

Examines the role of emergency management within transportation agencies and the role of transportation and related resources in community-wide responses to emergencies disasters. Includes instruction in Standardized Emergency Management Systems (SEMS).

MSTM Program Goals:

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

Goal One: Management of Transportation Organizations

Develop a system-level and global perspective on the management of transportation organizations.

Goal Two: Transportation Policy

Develop an awareness of the transportation policy environment, including fiscal mechanisms, legislative structures, and intergovernmental coordination.

Goal Three: Leadership

Develop potential for leadership in transportation organizations.

Goal Four: Communication Skills

Develop written and oral communication skills and techniques.

Goal Five: Analytical Skills

Develop ability to analyze management issues and situations using appropriate conceptual approaches.

Goal Six: Information Technology

Develop basic understanding of commonly used information technology applications used by the transportation industry.

Course Learning Outcomes

GOAL: To educate transportation professionals about emergency management as it applies to managing a transit system or transportation department.

OBJECTIVES:

- 1. Ensure that the student can assess the effectiveness of an organization's emergency management plan, which is assessed in Report #2.
- 2. Ensure that the student knows where to obtain guidance on emergency management, which is assessed in the Sources Consulted list of the Final Project.
- 3. Ensure that the student can assess the role of the transportation organization in community emergency management, which is assessed in the Final Project.

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

- LO1 Identify and evaluate the major principles of emergency management
- LO2 Use the terminology of emergency management correctly
- LO3 Manage intergovernmental relationships in emergency management
- LO 4 Develop and evaluate an emergency management program for a transportation department or agency.

Required Texts/Readings

Textbook

Edwards, Frances L. and Daniel C. Goodrich. 2012. *Introduction to Transportation Security*. Boca Raton, FL: CRC Press. ISBN-10: **143984576X** | ISBN-13: **978-1439845769** 0

Other Assigned Readings

DOT/FTA, Critical Incident Management Guidelines, Volpe National Transportation Systems Center. **July, 1998**. – class resource- handout

Edwards and Goodrich. (2009) *The Role Of Transportation In Campus Emergency Planning*. San Jose, CA: Mineta Transportation Institute

http://www.transweb.sjsu.edu/mtiportal/research/publications/summary/mti-0806.html

Edwards and Goodrich, (2010) *Handbook of Emergency Management for State-level Transportation Agencies*. San Jose, CA: Mineta Transportation Institute. http://www.transweb.sjsu.edu/MTIportal/research/publications/summary/MTI-0910.html

Edwards and Goodrich, (2014) *Exercise Handbook: What Transit Security Leaders Need to Know to Improve Emergency Preparedness*. San Jose, CA: Mineta Transportation Institute. http://transweb.sjsu.edu/project/1103.html

National Response Framework, 2nd edition, (2013) Department of Homeland Security – class resource, download or print

http://www.fema.gov/media-library-data/20130726-1914-25045-1246/final national response framework 20130501.pdf

National Response Framework Information Sheet, (2013) Department of Homeland Security, http://www.fema.gov/media-library-data/20130726-1914-25045-6465/final informationsheet response framework 20130501.pdf

Full Text for the ESFs

http://www.fema.gov/pdf/emergency/nrf/nrf-esf-intro.pdf or individual ESFs at http://www.fema.gov/national-preparedness-resource-library

Jenkins, B.M. (2001) Protecting Public Surface Transportation Against Terrorism and Serious Crime: Continuing Research on Best Security Practices. Report 01-07. San Jose, CA: Mineta Transportation Institute.

http://transweb.sjsu.edu/MTIportal/research/publications/summary/0107.html

MTI Report 02-06

Jenkins, B.M. and Edwards-Winslow, F.L. (2003). *Saving City Lifelines: Lessons Learned in the 9-11 Terrorist Attacks*. Report 02-06. San Jose, CA: Mineta Transportation Institute. http://transweb.sjsu.edu/MTIportal/research/publications/summary/0206.html

State of California, Emergency Operations Plan – City Model - handout

NTSB. (2008) Federal Family Assistance Plan for Aviation Disasters. http://www.ntsb.gov/tda/TDADocuments/Federal-Family-Plan-Aviation-Disasters-rev-12-2008.pdf

Other technology requirements / equipment / material)

All work is to be turned in as a Word document, attached to an e-mail.

Library Liaison

The Library Liaison for the Lucas Graduate School of Business is Christa Bailey (christa.bailey@sjsu.edu). The liaison for transportation is Diana Wu, 408-808-2087; Diana.wu@sjsu.edu

Course Requirements and Assignments

PLAGIARISM TUTORIAL: SJSU Library, due January 10, 2018, 5% of grade. http://library.sjsu.edu/video/plagiarism-graduate-level

At this website complete the tutorial, repeat the quiz until you obtain a grade of 80% or better, and send the score sheet to the class e-mail.

PAPER 1: Volpe Center Resource Review, due January 17, 2018, 20% of grade.

You will be provided with a collection of emergency management information for transportation organizations. Select one document of at least 5 pages *that is not a FEMA course or a class resource (listed above)* for review, and analyze how and when you would use it in emergency management. Select something that you would benefit from in your agency

Write a 2 page (double spaced) report using the public/council memo format (attached) describing the document you selected.

Background: why this document was created/purpose.

Analysis: how well you think the document achieved its purpose, how you would use it in

your agency. If you think the document is deficient, describe what is needed to improve it. Do not report on something that you decided is not useful at all.

Conclusion: statement of overall usefulness/application.

E-mail the 2 page report to the class e-mail address by 5:30 pm on the day it is due.

Prepare a 5 minute presentation on your document. Total value = 20%.

Criteria	Points
a) The professionalism with which the report is presented: clarity,	4
appearance, grammar, spelling, appropriate word choice, "voice".	

b) The comprehensiveness and care with which the document being analyzed is described.	4
	4
c) The demonstration of understanding of relevant concepts that can be used to explain the topic and its context, impact and policy or program outcomes.	4
d) The quality of critical thinking demonstrated in the Analysis section.	4
e) Value of the presentation to audience – clarity of purpose, possible application	4
TOTAL	20

PAPER 2: Organization Emergency Plan review, due January 31, 2018, 20% of grade. Get a copy of your organization's emergency operations plan, your child's school emergency plan

or a community emergency plan. Review its table of contents, and read the plan. Write a **2 page** (**double spaced**) **report** using the public/council memo format (attached to this syllabus) describing the emergency plan for the organization you selected.

Background: who was the plan written for – what kind and size of organization. What threats does it address, what organizational elements does it describe (management, operations, logistics, planning, finance)

Analysis: is it appropriate for its target audience? Is it clear? Is it complete? Is there anything that should be added or removed?

Conclusion: statement of overall usefulness and application

Prepare a 5 minute oral presentation of the information to deliver during class. E-mail the report to the class e-mail by 5:30 pm on the due date. (20%)

Criteria for evaluating the report	Points
a) The professionalism with which the report is presented: clarity, format,	4
grammar, spelling, appropriate word choice, "voice".	
b) The comprehensiveness and care with which the emergency plan being	4
analyzed is described in the Background.	
c) The demonstration of understanding of relevant concepts that can be	4
used to evaluate the plan's appropriateness for the organization,	
usefulness, completeness.	
d) The quality of critical thinking demonstrated in the Analysis section.	4
e) Value of the presentation to audience – description of the plan, possible	4
uses	
TOTAL	20

PAPER 3: Final Evaluation - Seminar Presentation, due date depending on topic, see class list

Submission: paper and PPT by e-mail to the class and professor (MTM226a@yahoo.com) on the day before the project is due.

Each member of the class will present a 30-minute paper for class discussion. The paper topic must be selected from the attached list. Students will choose the topics on the first night of class...first come/first served or draw lots if there are duplicate requests.

Write a 10 page (Times New Roman, 12 pt., double spaced) report (essay portion) using standard academic research paper format, including APA in-text citation of all sources consulted, and a complete Sources Consulted list at the end (an additional 1-2 pages). Each paper will use at least seven sources taken from documents such as newspapers, news magazines (Economist, Time, New Yorker, Atlantic Monthly or similar), government reports, peer reviewed journals, or scholarly books. NO WIKIPEDIA OR SIMILAR ENCYCLOPEDIA SOURCES!!!! Each paper will cover the selected topic in the context of the class, e.g. Hanshin Awaji and Sendei Earthquakes with transportation as a "victim." It will integrate information from class readings and discussions with the research material in the analysis section, such as application of ICS/SEMS/NIMS, threat analysis, the four phases of emergency management and similar topics.

The paper will have the following topic headings:

Description of event (not to exceed 4 pages)

include accident/event description: who, what, when, where, why, how environmental impact – fire, dust, explosion, haz mat deposition, extent of damage, loss of life, loss of infrastructure

Analysis of the context/how this event reflects the context (site, cause, victim, resource) (2-3 pages)

include local resources used to respond to the event outside response – mutual aid, NGOs

Transportation impacts (2 pages)

include information on which systems, for how long

Lessons learned (1 pages)

include any **outcomes**, such as changes in laws or regulations, design changes *Conclusion* (one paragraph).

On the date listed on the class schedule you will make a presentation of your paper supported by a PPT and lead student discussion of your topic for 30 minutes. **ALL STUDENTS ARE EXPECTED TO PARTICIPATE IN THE DISCUSSION OF THE TOPIC.** Your presentation is to be supported by **5-10** PPT slides, which may include relevant photos, tables, or charts.

The paper will be evaluated using the following criteria:

Criteria	Point Value
a) The professionalism with which the report is presented: clarity, appearance, grammar, spelling, appropriate word choice, "voice".	4
b) The comprehensiveness and care with which the event is described.	6
c) The demonstration of understanding of relevant concepts that can be used to explain the event and its context, impact and policy outcomes.	6
d) The quality of <i>analysis linking class discussion and readings</i> to the analysis of the event	8
e) The quality of critical thinking demonstrated in the Analysis section.	8
f) The <i>appropriateness of the references selected</i> and the analytical bridge to the paper topic; complete and proper citations.	8
TOTAL	40

Grading Information

- Paper 1: A 2 page review written in public report format (attached to this syllabus) describing one of the documents from the handout of the Volpe website, and oral presentation of the information (5 minutes). (20%)
- Paper 2: A 2 page review written in public report format (attached to this syllabus) describing the emergency plan for your agency, and oral presentation of the information (5 minutes). (20%)
- Project: A 10 page paper on a topic selected from the list below, and a **30 minute presentation** with PPT, including discussion in class of the paper. (40%)

Class participation (15%). This includes interacting with the professor and other students during lectures and student presentations. Participation in the discussion of student projects accounts for 10% of your overall grade, and question and answer during lectures accounts for 5%.

Plagiarism tutorial (5 points). Students should take the plagiarism tutorial at the library's website. Access it from this URL, http://library.sjsu.edu/video/plagiarism-graduate-level and obtain a grade of 80% or above. Send the grade report to the professor electronically to the class e-mail.

LATE WORK WILL NOT BE ACCEPTED except in cases of serious personal or dependent family illness. Incompletes are discouraged.

Grade distribution.

Task	% of Course Grade
Project 1	20%
Project 2	20%
Plagiarism Tutorial	5%
Final Project	40%
Participation in class discussions	15%
Total	100%

Determination of Grades

Percentage	Grade
A+	98 and above
A	92-97
A-	90-91
B+	88-89
В	82-87
B-	80-81
С	75-79
D	70-74
F	69 and below

Classroom Protocol for the Lucas College Graduate School of Business

http://www.sjsu.edu/cob/Students/policies/index.html

University Policies

Per University Policy S16-9, university-wide policy information relevant to all courses, such as academic integrity, accommodations, etc. will be available on Office of Graduate and Undergraduate Programs' Syllabus Information web page at http://www.sjsu.edu/gup/syllabusinfo/"

Lucas College and Graduate School of Business Mission

We are the institution of opportunity in Silicon Valley, educating future leaders through experiential learning and character development in a global business community and by conducting research that contributes to business theory, practice and education.

MTM 226A/ Emergency Management for Transportation Professionals, Spring 2018A, Course Schedule

The schedule is subject to change with fair notice to students via e-mail.

Wee	Date	Topics, Readings, Assignments, Deadlines
1	1/3	Self-introductions, personal goals, introduction to the course/syllabus review. Good writing, research resources at SJSU * writing and citing
2	1/10	PLAGIARISM TUTORIAL- SCORES DUE ICS/SEMS/NIMS Combined Course Student Guides will be e-mailed Take-home test if you want a certificate of completion (optional). TRANSPORTATION SECURITY THEORY AND PRACTICE- Reading: Edwards and Goodrich, Chapt. 1
3	1/17	STUDENT REPORTS ON VOLPE CENTER READING (PAPER 1) RISK MANAGEMENT – Readings Provided by e-mail. HISTORY OF EMERGENCY MANAGEMENT Reading: Edwards and Goodrich, Chapt. 2

4	1/24	EMERGENCY OPERATIONS PLANNING Readings: DOT/FTA, Critical Incident Management Guidelines, Volpe National Transportation Systems Center. July, 1998. – class resource; handout. Read Sections 3,4 and 5 IMPLEMENTATION OF EMERGENCY PLANS Reading: Edwards and Goodrich, Handbook of Emergency Management for State-level Transportation Agencies, http://www.transweb.sjsu.edu/MTIportal/research/publications/summary/MTI-0910.html Read research report and Annex K, skim other annexes EMERGENCY MANAGEMENT PARTNERS; SECURITY AND THREATS Readings: Edwards and Goodrich, Chapt. 3&4 National Response Framework Information Sheet, (2013) Department of Homeland Security, http://www.fema.gov/media-library-data/20130726-1914-25045-6465/final informationsheet response framework 20130501.pdf ESF 1,3 & 7 – select at the website below, click "National Preparedness Materials" then scroll down to National Response Framework Emergency Support Function (ESF) Annexes: http://www.fema.gov/national-preparedness-resource-library
		EMERGENCY OPERATIONS CENTER: ROLES AND GOALS Readings: The Role Of Transportation In Campus Emergency Planning, http://www.transweb.sjsu.edu/mtiportal/research/publications/summary/mti-0806.html Scroll to the bottom and select "Full Report". Read the Introduction, Literature Review, Findings and Analysis as an example of how an EOC is organized, and transportation's roles, then review the five annex section checklists for examples of what EOC checklists should look like.
5	1/31	STUDENT REPORTS ON EMERGENCY PLANS (PAPER 2) Continuity of Operations/Continuity of Government for State Level Transportation Organizations, http://transweb.sjsu.edu/project/2976.html , Scroll down, select Research Report (7.9 mg), download. Read pp. 9 – 64, and review Appendix B, Tab 3, Tab 4, Tab 6 and Tab 7

6	2/7	STUDENT PRESENTATIONS
		TRANSPORTATION AS THE SITE Readings Edwards and Goodrich, Chapt. 7, 8, 9 Topic: Long Island Railroad murders, 1993
		TRANSPORTATION AS THE CAUSE Reading: ESF 10- select at http://www.fema.gov/national-preparedness-resource-library Texas City shipboard explosion, 1947 Dunsmuir train derailment, 1991
7	2/14	STUDENT PRESENTATIONS
		TRANSPORTATION AS THE CAUSE Readings: Edwards and Goodrich, Chapt. 10 NTSB. (2008) Federal Family Assistance Plan for Aviation Disasters. http://www.ntsb.gov/tda/TDADocuments/Federal-Family-Plan-Aviation-Disasters-rev-12-2008.pdf Topics: Baltimore Tunnel Fire, 2001 Air crashes: ValuJet Crash, Miami, 1996 Alaska Airlines/Ventura County, 2000
8	2/21	STUDENT PRESENTATIONS TRANSPORTATION AS THE CAUSE AND VICTIM Reading: Jenkins and Edwards-Winslow, Saving City Lifelines, Report 02-06 http://transweb.sjsu.edu/MTIportal/research/publications/summary/0206.html Scroll to the bottom and select the report. Topic: 9/11 Pentagon Attack, 2001 Lecture: World Trade Center
		TRANSPORTATION AS THE VICTIM Topic: Madrid Train Bombing, 2004 London Train and Bus Bombing

9	2/28	STUDENT PRESENTATIONS
		TRANSPORTATION AS THE VICTIM
		Readings: Edwards and Goodrich, Chapt. 5& 6
		Jenkins, B.M. (2001) Protecting Public Surface Transportation Against Terrorism and
		Serious Crime: Continuing Research on Best Security Practices. Report 01-07.
		San Jose, CA: Mineta Transportation Institute.
		http://transweb.sjsu.edu/MTIportal/research/publications/summary/0107.html
		Edwards, F.L., Goodrich, D.L., Helweg, M., Strauss, J., Eskijian, M.L., and Jaradat, O., (2015).
		Great East Japan Earthquake, JR East Mitigation Successes and Lessons for California
		High Speed Rail. Report 12-37. San Jose, CA: Mineta Transportation Institute.
		Reading: Edwards and Goodrich, Chapt. 11
		Topics: Loma Prieta Earthquake, 1989
		Northridge Earthquake, 1994
		Hanshin Awaji (Kobe) Earthquake, 1995
		Great East Japan, 2011
10	3/7	STUDENT PRESENTATIONS
		TRANSPORTATION AS A VICTIM AND RESOURCE
		Reading: Mass Evacuation Incident Annex
		http://www.fema.gov/media-
		<u>library/assets/documents/25548?fromSearch=fromsearch&id=5525</u>
		Topics:
		Hurricane Katrina Evacuations, 2005
		Hurricane Ike Evacuations, 2008
		Hurricane Sandy Evacuations, 2012
		COURSE WRAP-UP
		Lecture: If The Solution To Pollution Is Dilution

Date	Context:	Project Title	Student
2018	Transportation		
	as the		
Feb 7	Site	Long Island Railroad Murders	
	Cause	Texas City	
	66	Dunsmuir Train Derailment	
Feb 14	Cause	Baltimore Tunnel Fire	
	"	ValuJet Airlines, Everglades	
	66	Alaska Airlines/ Ventura County	
Feb 21	Cause and Victim	9/11 Pentagon Attack	
		9/11 World Trade Center Attack	Professor
	Victim	Madrid Train Bombing	
		London Subway/Bus Bombing	
Feb 28	Victim	Loma Prieta Earthquake	
		Northridge Earthquake	
	66	Hanshin Awaji (Kobe) Earthquake	
	"	Great East Japan (Sendei) Earthquake	
March 7	Victim	Hurricane Katrina Evacuation	
		Hurricane Ike Evacuation	
	"	Hurricane Sandy Evacuation	
	Course Wrap-Up	If the solution to pollution is dilution	

Revised 12/7/17

TO: Dr. Frances L. Edwards **FROM:** Joe Student

MTM226A

DATE: January 17, 2018 **SUBJECT:** [Name of Volpe Document]

Background: why this document was created/purpose.

Analysis: how well you think the document achieved its purpose, how you would use

it in your agency? If you think the document is deficient, describe what is needed to improve it. [Note: do not review a document that you believe is

outdated or not useful.]

Conclusion: statement of overall usefulness/application.

TO: Dr. Frances L. Edwards **FROM:** Joe Student

MTM226A

DATE: January 31, 2018 **SUBJECT:** [Name of Agency] Plan

Background

When was the plan written? What was the impetus for the plan?

Analysis

Was the plan appropriate for the size and complexity of the organization? Comprehensive? Are there parts missing? Is the plan well written?

Conclusion

Is the plan adequate for the organization? What changes if any are needed?

Signature Typed Name

Spelling and Grammar Guidance

Common Graduate Student Mistakes!!

- 1. Never use a long word when a short word will do. (George Orwell)
- 2. Never use "etc." in a professional paper. It is meaningless. If you want to indicate that your list is only part of a larger potential list, say, "grapes, peaches and pears, for example," or "among other things," or a similar phrase.
- 3. Use your grammar checker, THEN proof read to be sure you selected the right usage in context.
- a. Be careful of the "passive voice rule." It is often appropriate, and if it should be changed to active voice, the suggested wording almost never makes sense.
- b. Never use "change all" for a grammar rule, as it will lead to odd usages. Just read each suggestion and decide whether to change based on each sentence.
- 4. Use your spell checker, THEN proof read to be sure you selected the right word in context.
- 5. Check to be sure you are using the right homonym: Check especially for these four frequently misused sets:
- a. Their, there, they're
- b. Right, write, rite, wright
- c. Sight, site, cite
- d. Its, it's
- 6. Do not use contractions in formal writing unless it is a direct quote: Don't, Can't, It's, Won't, and all the others!
- 7. Check on capitalization. A sentence begins with a capital letter, as does a proper name of someone or someplace or an organization. Federal, state, city and local are only capitalized if they start a sentence or are part of a title or proper name. The federal government is not a proper name but the United States Government is, for example.
- 8. Capitalize at the start of most quotes, even when they are inside a sentence. Here is an example. I went to class and Professor Edwards said, "Do not ever use a contraction when writing for this class." Titles are only capitalized when they come before a name (Professor Edwards, the professor).
- 9. If you want to use an abbreviation or acronym (e.g., FEMA), be sure to spell it out the first time you use it. For example, "When James Lee Witt was head of the Federal Emergency Management Agency (FEMA), he came to San Jose. He wanted to show FEMA's support for Mayor Susan Hammer."
- 10. Be careful that you use "then" and "than" properly. "Then" is related to time sequences. For example, I went to school, **then** I took a nap." A mnemonic that

will help you to remember the right order is that "Then" is related to "Time" and both have an "e". "Than" is a comparison, such as, "I like cherries more **than** bananas." Both have "a".

- 11. Be careful in using the apostrophe for possessive and plural. For a plural word in English you just add the letter "s" or sometimes "es" or "ies." **There is no punctuation for plural**. In general, to form a possessive you use "'s". For example, "my **dog's** bone." The only exception is the word "its" which means "belonging to it" but does not take the punctuation. **It's** means "**it is**," a contraction, and you do not use contractions in formal writing.
- 12. In general you do not use commas after prepositional phrases. "In support of his position John gave two examples." However, if you have several prepositional phrases before the main sentence you may set them off with commas to make it clear what relates to what. "In supporting his team for the finals, John wore a Shark's shirt to school."
- 13. Hyphens are used to join words that modify another word. For example, political- science professor, little-used car, pickled-herring merchant. Without the hyphens it might be hard to tell if the science professor was running for president, the used car was small, or the fish seller was drunk!
- 14. Abbreviations are only used for titles (Mr., Ms., Dr.) or standard suffixes (Jr., Sr., Ph.D.). States are abbreviated only when using a proper address, not in prose.
- 15. Numbers: spell out the word for numbers ten and under, and all numbers that begin a sentence (One hundred fifty boys went to school.) Use numerals for numbers of 11 and over. Always use the numerals for percentages, money, road routes or scientific calculations.
- 16. Italics within a sentence should be used for titles of works (books, movies, plays, poems, television programs), but not for Bible or Constitution. Italics are also used for foreign words, such as *vis a vis*. Avoid foreign words unless you are very sure you are using them correctly.
- 17. None and neither are always singular words. They were originally contractions that became their own words none= no one, not one, and neither = not either one. So, singular verb forms are used with none and neither.
- 18. The verb agrees with the subject number. "There is one child here." "There are no children here." The verb does not agree with the complement. "**None** of the boys **is** going to the game."
- 19. Gerunds are always singular. "Encouraging good writing is important."
- 20. Pronouns must match the noun and verb. "The doctors finished their rounds." When you do not know the gender, use masculine. "The doctor finished his rounds." Singular generic nouns must take "he" or "she." Do not use "they" to avoid the gender problem!