

San José State University ~ Lucas Graduate School of Business
Master of Science in Transportation Management

MTM 283: MSTM Capstone - Project Design
Fall-B 2025

Course and Instructor Contact Information

Instructor: Asha Weinstein Agrawal

Office Location: Mineta Transportation Institute
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San Jose, CA

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Office Hours: Sign-up sheet available on the class Canvas site

Class Day/Time: Tuesdays, 5:30 – 9:30 pm, on October 7, October 15, October 21, November 18, and December 16

Prerequisites: Completion of 21 units towards the MSTM degree

Course website: Canvas

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 will join class using SJSU Zoom. Be sure to follow good online meeting etiquette, presenting yourself with the level of professionalism you would use for in-person meetings:

- 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
- Keep your camera on throughout the meeting

- Check your background to make sure it is professional—simple is fine (e.g., a blank wall)

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 new computer or device, allow extra time for set-up.)

The university has tutorials on how to use Zoom here: <https://www.sjsu.edu/learnanywhere/how-tos/zoom/index.php>

Notification about class recordings: Class sessions are audio and video-recorded through Zoom. The Zoom recordings are usually available to registered students, on request, for personal use only. Recordings may not be shared. There is also not a guarantee that a recording will be available.

Messaging/Course Communications

Course materials will be posted on the Canvas Learning Management System (<http://sjsu.instructure.com>).

You are also responsible for regularly checking the email address associated with your MySJSU account in order to learn of any course updates. If you have not already done so, you can set up your SJSU email to forward to the email address of your choice.

Course Description

Advanced policy or program evaluation design and proposal writing. Students conduct background research and develop a Policy or Program Evaluation Plan that demonstrates their capacity to do independent research, analysis, and writing about a complex transportation management problem.

MSTM Program Goals

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

1. Transportation Systems and Society: Craft management decisions that integrate knowledge of multi-modal transportation, social, and environmental systems
2. Innovation: Develop innovative solutions for transportation management challenges
3. Leadership: Develop high-impact leadership styles and competencies (traits, skills, behaviors)
4. Communications: Communicate effectively with a diverse workforce and citizenry.
5. Analytics: Identify and evaluate transportation management issues using appropriate data and analytical methods

Course Learning Outcomes

This course is the first part of the capstone experience for MSTM students. In MTM 283, students develop the skills and knowledge to complete a plan for a policy or program evaluation or similar analytical management project. Course content covers how to frame effective evaluation questions to guide a program evaluation, identify appropriate literature relevant to an evaluation topic, and determine appropriate data sources and analysis methods. In addition, students deepen their skills at professional writing and providing constructive feedback on writing to peers.

Through the MTM 283 coursework, students develop their ability to:

1. Conceptualize a program or policy evaluation project that has a precise evaluation question and methods that are feasible and credible
2. Identify and summarize appropriate professional literature relevant to a proposed area of evaluation
3. Prepare written reports with clear and compelling prose (tables, charts, etc.), in a style appropriate for a transportation manager
4. Prepare constructive, tactful feedback to help peers improve their writing

Required Texts/Readings

Students must purchase one required text: Kate L. Turabian's *A Manual for Writers of Research Papers, Theses, and Dissertations*, 9th ed (Chicago: University of Chicago Press, 2018). New copies can be purchased for about \$22.00.

There also will be short readings in electronic format provided on Canvas or available through the SJSU library.

Library Liaison

The Library Liaison for the Lucas Graduate School of Business is Christa Bailey (christa.bailey@sjsu.edu). Students may contact her to request research assistance.

Course Requirements and Assignments

Students complete most work for this course independently, with the instructor providing feedback through one-on-one meetings. In addition, students must attend five class sessions that cover course material applicable to all students.

The core class requirement is to prepare two drafts and a final version of a policy or program evaluation plan. The final evaluation plan will include a clear description of the evaluation question(s) to be answered, the intended audience for the final project, a well-evidenced explanation of why the intended audience would want to read your final report, a detailed plan

for the evaluation methods (data sources and approach to the analysis), an annotated bibliography, and a work plan for completing the project in MTM 290.

The following table lists all required class activities.

Assignments and Activities	Learning Objectives Covered
Draft Evaluation Plan #1	1, 2, 3, 4
Discussion of Draft #1 with Asha	1, 2, 3, 4
Peer Feedback for Draft #1	1, 2, 3, 4
Draft Evaluation Plan #2	1, 2, 3, 4
Discussion of Draft #2 with Asha	1, 2, 3, 4
Peer Feedback for Draft #2	1, 2, 3, 4
Discussion of Draft #2 with writing consultant	3
Final Evaluation Plan	1, 2, 3, 4
Evaluation Plan Lighting Talk (oral presentation with slides)	1, 2, 3, 4
Participation in discussions during class and on Canvas	1, 2, 3, 4
Short homework assignments	3

Due dates for all assignments are listed below, in the course schedule.

Additional details about each assignment will be shared on Canvas.

Grading Information

MTM 283 uses a Credit/No Credit (CR/NC) grading structure. To earn CR, a student must complete all assignments and receive a passing grade (B- or better) on the Final Evaluation Plan assignment.

The late penalty on the Final Evaluation Plan is one third of a letter grade (e.g., from an A- to a B+) for each day late.

Students who do not complete a good-quality Final Evaluation Plan will **fail the course** and must retake it before registering for MTM 290.

Planning Ahead for MTM 290

Students are expected to continue data collection independently between the end of MTM 283 and the beginning of MTM 290. By the time you begin MTM 290, all of your data should be collected and you should be very familiar with their contents. For example:

- Any planned interviews are done, and you've had a chance to review/thoughtfully examine your notes or transcripts.
- Any planned documents for review have been gathered, read, and reviewed thoughtfully.
- Any planned quantitative data has been gathered and cleaned for analysis, and you've had a chance to explore the data and run some preliminary tests.

The more familiar you are with your data at the start of MTM 290, the more effective your in-depth analysis will be. Your first major assignment is due less than two weeks into MTM 290, and in order to complete that assignment, you will need to come into MTM 290 with a thorough preliminary analysis of your data.

Use of Generative AI

Note: As an SJSU student, you have free access to ChatGPT Edu which offers more capabilities than the free version of ChatGPT.

It is prohibited to use GenAI tools to produce draft or final text of an assignment in MTM 283. However, you are welcome to use GenAI to:

- Find data or other types of information
- Brainstorm ideas related to a topic
- Check spelling and grammar
- Rephrase sentence or reorganize paragraphs that you drafted yourself. (Don't use whole sentences or paragraphs that an AI generated.)
- Refine outlines you drafted yourself
- Generate images
- Refine document or slide design

If you choose to use AI to complete an assignment in MTM 283, you must:

- Review SJSU's guidance on using AI paying particular attention to the sections on AI Ethics and Citing AI Use
- Verify all information that you find through an AI platform. AI frequently “hallucinates” by inventing material that does not exist or misinterpreting material it reviews. For example, AI tools will invent citations to published materials that

don't exist or misinterpret documents. (Think of AI tools like interns – smart and helpful, but liable to make frequent mistakes.)

- Complete SJSU's Student AI Disclosure (SAID) form and submit it with the assignment
- Add a short statement to the assignment describing how you used AI in the work
- Cite images generated with AI, just as you would any other source
- If you wish to use whole sentences or longer blocks of text created by an AI tool, put the material in quote marks and cite the source, just as you would any other source. (Use of AI-generated text is discouraged, however, and should be done very sparingly, if at all.)

Plagiarism and Citing Sources Properly

Plagiarism is the use of someone else's language, images, data, or ideas without proper attribution. It is a very serious offense both in the university and in your professional work. In essence, plagiarism is both theft and lying: you have stolen someone else's ideas, and then lied by implying that they are your own.

Plagiarism will lead to grade penalties and a record filed with the Office of Student Conduct and Ethical Development. In severe cases, students may also fail the course or even be expelled from the university.

If you are unsure what constitutes plagiarism, it is your responsibility to make sure you clarify the issues before you hand in draft or final work.

Common types of plagiarism that you should be careful to avoid include:

- Using a sentence (or even a part of a sentence) that someone else wrote *unless* you identify the language as a quote by (1) putting the text in quote marks and (2) referencing the source.
- Paraphrasing somebody else's theory or idea without referencing the source.
- Using a map, picture, or table without referencing the source.
- Using data without referencing the source.

The University of Indiana has developed a helpful website with concrete examples about proper paraphrasing and quotation: <https://plagiarism.iu.edu/index.html>.

You are encouraged to use TurnItIn.com as a tool to help confirm that there is no plagiarized text in your assignments, so that you can fix any potential problem text before formally submitting the assignment. When you submit writing assignments to Canvas, TurnItIn.com will generate a "Similarity Report" that highlights all text that TurnItIn.com identifies as possibly plagiarized. The report will also give you a "score" that shows how much text has been flagged. Please note that the TurnItIn.com similarity reports are helpful but not perfect – they tend to highlight lots of material that is not actually plagiarized, and the reports can also potentially miss problematic text. Therefore, I strongly recommend that you completely ignore the numeric score and instead

carefully review all text that is highlighted in the Similarity Report to check if any of these sections need revision.

For instructions on how to find your TurnItIn.com reports in Canvas, see
<https://guides.turnitin.com/hc/en-us/categories/21850416398221-Student-hub>

If you would like to submit draft work in advance to check for possible plagiarism, you can use the “TurnItIn test assignment” in Canvas. I do not check documents turned in here; this “assignment” is solely for students to check their own work.

If you still have questions about citing sources and paraphrasing appropriately after using these online resources, make an appointment to discuss your questions. There is nothing wrong with asking for help, whereas even unintentional plagiarism is a serious offense.

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
(<https://www.sjsu.edu/curriculum/courses/syllabus-info.php>)

MTM 283 Course Schedule

Schedule subject to change with advanced notification in class and/or in Canvas

October 7 Class #1	Class activities	Overview of the course, principles of policy evaluation, designing an evaluation question, finding professional and scholarly literature Guests: MTM 283 alumni <u>Thomas Arndt</u> , <u>Tish Johnson</u> , and <u>Walter Yu</u>
	Reading due:	Turabian: “Chapter 2: Defining a Project: Topic, Question, Problem, Working Hypothesis”
	Optional:	TRB Webinar: “ <u>TRID Searching</u> ” (1-hour video) “ <u>Librarians Do Gaga</u> ” (5 minute video spoofing “Poker Face”)
	Work due:	Discussion 1: Let’s Get to Know Each Other
October 14 Class #2	Class activities	Evaluation design, continued
	Work due:	Draft Evaluation Plan #1 (by class time)
	Reading due:	Bernard Coleman, “ <u>If You’re Using One of These 8 Ways to Deliver Feedback, Stop Now</u> ,” Inc.com, February 24, 2025.
	Optional reading:	Robert Caro, “ <u>The Secrets of Lyndon Johnson’s Archives: On a Presidential Paper Trail</u> ,” <i>New Yorker</i> , January 21, 2019
		Peter Elbow, “Freewriting,” in <i>Visions Across the Americas: Short Essays for Composition</i> , edited by J. Sterling Warner and Judith Hilliard (Fort Worth: Harcourt, 2001). pdf in Canvas

October 21 Class #3	Class activities	Writing skills for transportation managers Guest: Writing Consultant <u>Lisa V. Rose</u>
	Work due:	Homework #1: Using Sources Ethically Complete Draft #1 discussion with Asha Complete Draft #1 discussion with your Peer Feedback Group
	Reading due:	Turabian: “Chapter 11 Revising Sentences” “Chapter 3: Paragraphs” in <i>The Little, Brown Handbook</i> , 5 th edition (pdf in Canvas)
	Optional reading:	George Orwell, “ <u>Politics and the English Language</u> ,” <i>Horizon</i> , April 1946. Patricia Nelson Limerick, “Limerick's Rules of Verbal Etiquette” (pdf in Canvas) Alex LeRoy, “ <u>The Language of Self-Driving Cars Is Dangerous—Here's How To Fix It</u> ,” <i>The Drive</i> , May 9, 2018 Karin Wulf, “ <u>Could Footnotes be the Key to Winning the Disinformation Wars?</u> ” <i>Washington Post</i> , August 29, 2019. Anna Brown, “ <u>How We Check Numbers and Facts at Pew Research Center</u> ,” <i>Decoded</i> (Pew Research Center), August 14, 2019. Joseph M. Williams, <i>Ten Lessons in Clarity and Grace</i> , 8 th ed. (New York: Pearson Longman, 2005). Patricia T. O’Conner, <i>Words Fail Me: What Everyone Who Writes Should Know about Writing</i> (San Diego: Harcourt Brace, 1999). Jane E. Miller, <i>The Chicago Guide to Writing about Numbers</i> (Chicago: University of Chicago Press, 2005).

November 11	Work due:	Draft Evaluation Plan #2
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November 18 Class #4	Class activities: Work due: Reading due: To watch: Optional reading:	Next steps with the evaluation plans, information design, citation formatting Homework #2: Citation Formatting Homework #3: Designing Effective Tables and Charts Draft #2 discussion with Professor Agrawal Draft #2 peer feedback activity Turabian: “Chapter 8: Presenting Evidence in Tables and Figures” and “Chapter 15: General Introduction to Citation Practices” Chapters 2 and 4 from Edward Tufte’s book <i>The Visual Display of Quantitative Information</i> (pdf in Canvas) Steven Franconeri, “ The Keys to Persuasive Visual Storytelling ,” Kellogg School of Management webinar series “The Insightful Leader,” January 22, 2021 Lena V. Groeger, “ How Information Graphics Reveal Your Brain’s Blind Spots ,” <i>ProPublica</i> , April 20, 2016. “ Cole Nussbaumer: Death to Pie Charts!...and Other Lessons in Storytelling with Data ,” May 12, 2015 “ Storytelling with Data: Cole Nussbaumer Knaflic: Talks at Google ,” November 11, 2015
December 5	Work due:	Consultation with writing consultant (must pre-schedule)
December 16 Class #5	Class activities: Work due: Optional reading:	Evaluation Plan Lightning Talks Slides for the Evaluation Plan Lightning Talk Glenn Jeffers, “ 5 Tips for Pitching Your Startup to Investors; ‘Make Your First 30 Seconds Count,’ and Other Advice from a Seasoned Venture Capitalist ,” <i>Kellogg Insight</i> , January 6, 2020.
December 18	Work due:	Final Evaluation Plan “Final Reflection” discussion post
