

San José State University
Lucas Graduate School of Business
Master of Science in Transportation Management
MTM 215: Transportation Planning and Project Development
Fall-B 2023

Course and Instructor Contact Information

Instructor:	Doug Johnson
Email:	Doug.Johnson@sjsu.edu
Office Hours:	By appointment
Class Day/Time:	Tuesdays, 5:30-9:30 pm, on October 3, 10, 17, 24, 31, November 7, 14, <u>no class November 21</u> , 28, December 5, 12
Classroom:	Online (Zoom)
Course website:	Canvas (http://sjsu.instructure.com)

"How to accommodate city transportation without destroying the related intricate and concentrated land use? – this is the question. Or, going at it another way, how to accommodate intricate and concentrated land use without destroying the related transportation." – Jane Jacobs

"Transportation and cities are co-dependent, mutually influencing each other in often complex and dynamic ways. It is less the hardware characteristics of roads and transit lines and more the software characteristics – notably the accessibility benefits provided – that shape urban environments." – Robert Cervero

"A city must ever deal mainly with the direction and width of its streets." -Daniel Burnham (about his 1905 plan for San Francisco)

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://blog.gotomeeting.com/7-rules-virtual-meeting-etiquette-every-professional-know/>)

To access class sessions by Zoom, click on the following link from your computer or tablet: ***A Zoom address will be provided***

Plan to join at least five 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: <http://www.sjsu.edu/ecampus/teaching-tools/zoom/index.html>

Faculty Web Page and MYSJSU Messaging

Course materials such as syllabus, handouts, notes, assignment instructions, etc. can be found on [Canvas Learning Management System course login website](http://sjsu.instructure.com) 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 transportation planning and project development processes, including: regional and state system-wide planning; city-county-transit agency planning; project-level planning; environmental review; obtaining governmental approvals; contract management; and project management. Most classes will include a guest speaker with real-world planning experience and advice on the state of the practice.

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

In this course students will explore the planning and development of surface transportation systems in the context of current and past government goals, policies and regulations. The goal is for students to begin to understand the complex interrelationships that exist between transportation, land use, and the environment, the balancing of competing interests in the multi-faceted and multi-jurisdictional intergovernmental settings that are characteristic of states and major metropolitan areas, and the processes followed to develop consensus on transportation strategies.

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

1. Explain the general history of transportation planning in the US and the impact of transportation planning on the transportation system.
2. Explain current processes and theories for state, regional, and project planning including their relative strengths and weaknesses
3. Explain best practices in public engagement across all type of communities, with a special focus on underserved and historically marginalized groups; discuss how this engagement and environmental review influence planning processes
4. Design effective and feasible performance frameworks; understand some of the tools available to complete necessary analysis including relatives strengths and weaknesses
5. Explain best practices in managing contracts and contractors
6. Explain the basic tenants of project management

Required Texts/Readings

Textbooks

Inclusive Transportation: A Manifesto for Repairing Divided Communities by Veronica Davis
Roadways for People: Rethinking Transportation Planning and Engineering by Lynn Peterson
The Geography of Urban Transportation Fourth Edition by Genevieve Giuliano and Susan Hanson

All other readings will be online and available via Canva. Students will use the course's Canva page to confirm all readings and assignments for this class.

Library Liaison (Optional)

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

Course Requirements and Assignments

Success in this course is based on the expectation that students will spend, for each unit of credit, a minimum of 45 hours over the length of the course for instruction, preparation/studying, or course related activities.

The following activities/assignments are required in this course and will be graded:

1. Weekly posts on the assigned readings on the course Canva page. Approximately 150 words each week. Students will submit all nine of these in a single file (pdf, word, odt) at the end of the course. Your weekly reading responses should address the following:
 1. What are the key takeaway points from the reading?
 2. What interesting or relevant news articles did you find on this topic?
 3. At the end of your reading response, please also formulate two or three questions for class discussion based on the reading.
 4. Reading responses are due by 11:59pm on the Monday before class. No reading response is due for the first or last class.
2. Written assessment of a recent transportation plan from your current or past home city or region. Approximately 2000 words. The use of images is encouraged. More detailed information will be available of Canva October 9.

3. Attend a public meeting that is part of a transportation planning study. Describe the purpose of the study and how it fit into the longer arc of the planning process. Summarize what you heard at the meeting from the hosts and from meeting attendees. Describe what methods were used and what recommendations you would have to improve the meeting in the future. If possible, reach out to the staff that hosted the meeting to hear what observations they had regarding the meeting and how the input will be used. Approximately 1500 words. More detailed information will be available on Canva October 23.
4. Team assignment – students will be assigned to a team of 3-4 students to research and analyze transportation data and present findings to the class. Each team should prepare data files and a presentation to be submitted the same day as the presentation. More detail will be available on Canva October 23.
5. In class projects, including parter brainstorming on assigned work and brief writing assignments

Assignments/papers are open book, open notes, and will be sent out to students during specified times. Each student will be allowed a specified amount of time to complete each assignment/paper. Students will then be requireTeam assignment – students will be assigned to a team of 3-4 students to research and analyze transportation data and present findings to the class. Each team should prepare data files and a presentation to be submitted the same day as the presentation. More detail will be available on Canva October 23.d to submit materials on Canva. Tentative course calendar including assignment due dates, date of final exam is “subject to change with fair notice”.

All work must be submitted via Canva. Students should clearly identify all of their work with the student’s name clearly indicated on all submitted work and each document title: last name first, first name last and the title of the assignment. Late paper and project assignments will be accepted but the score will be reduced one full letter grade for missing the due date and/or time. In-class assignments may be made up if issues leading to their not being completed are discussed with the professor before or shortly after the time of the missed class. Missed assignments will result in a score of zero. Students who turn assignments in on time will normally receive comments from me within 7-10 days.

Grading Information

The following chart lists value of each graded assignment and its relationship to overall course grading. Each graded assignment will be returned to students within 7-10 days of submittal with comments indicating areas for improvement and to show how specific grades were determined and assigned. Students will have an opportunity to contact the instructor at any time to discuss grades, progress, or other issues as necessary. Should a student wish to speak directly with the instructor a mutually beneficial time will be identified, and the student will contact the instructor by phone at the number provided on the first page of this syllabus.

Assignments and Other Graded Activities	Due Date	% of Course Grade	Course Learning Objectives Addressed
Weekly reading write up (8)	Weeks 2-9	25%	1, 2, 3, 4, 5
Team Data & Planning Assignment & Presentation	Outline: Week 7 Final: Week 10	20%	1, 3, 4, 5
In-class Writing Assignments	Week 4 and 7	15%	1, 2, 3, 4, 5
Hometown Planning Assignment	Week 5	20%	1, 2, 4, 5
Hometown Planning Assignment	Week 8	20%	1, 2, 3, 4, 5

Determination of Grades

Success in this course is based on the expectation that students will attend each scheduled class. Grading will be determined through a combination of scoring on Class Discussion/Current Events, a Class Data Assignment, Two In-class Writing Assignments, Two Class Papers, and a Course Project.

- Class Discussion/Current Events: Students are expected to have reading assignments completed and be prepared, on the date indicated in the schedule of assignments (below), to discuss the assigned readings and additional readings assigned or as required for the full development of classroom discussions. Students are required to bring with them to every class one current event that they may be asked to present to and analyze for the class. Readiness to discuss current events will be noted and referenced when assigning points for this portion of the course as follows: participation in 9 or 10 class sessions = 5 pts; participation in discussion for 8 class sessions = 3 pts; participation in fewer than 8 sessions = 0 pts.
- Course Project and Assignments/Papers: Please see above.
- Assignments turned in late, will result in a full grade reduction. For example, if a paper were awarded an A, but was turned in late, the assigned grade would be a B. Unless cleared by the instructor, all assignments are due on the date of the last day of class.

* Extra credit is NOT available in this course.

Letter grade calculation

Percentage	Grade
98% - 100%	A+
97% - 94%	A
93% - 90%	A-
89% - 87%	B+
86% - 84%	B

Percentage	Grade
83% - 80%	B-
79% - 77%	C+
76% - 74%	C
73% - 70%	C-
69% - 67%	D+
66% - 64%	D
63% - 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.

Course Schedule

Note: This schedule is subject to change with fair notice. As necessary, the instructor will provide all information regarding schedule changes in class and through Canvas during class.

Week	Date	Discussion Topics, Reading assignments, and Assigned Work
1	10/03	Course Overview ○ Student/Instructor Expectations ○ Student Introductions ○ Discussion of Class Assignments ○ Transportation Planning in Perspective Reading Introduction - Inclusive Transportation: A Manifesto for Repairing Divided Communities by Veronica Davis Introduction - The Geography of Urban Transportation Fourth Edition by Genevieve Giuliano and Susan Hanson Discussion “Past” approaches to planning and projects Learn More: Urban Transportation Planning in the United States: An Historical Overview by Ed Weiner, 1997. Skim Chapters 1-9 (Get an idea of the History of the system in the US. When it began how and why and when it expanded, how and why?) https://rosap.ntl.bts.gov/view/dot/13691
2	10/10	Reading Chapter 1 and 2 – Lynn Peterson Inclusive Transportation: A Manifesto for Repairing Divided Communities by Veronica Davis MTC Priority Development Area Planning Grant program guidelines: PDA-Planning-Grants-Guide-Process-and-Elements.pdf Metropolitan Transportation Commission (ca.gov) Guide to Sustainable Transportation Performance Measures (epa.gov) Discussion Topics: ○ Local and County transportation planning; ○ Planning for projects and policy;

		○ Performance metrics Learn More: Performance Measurement Fundamentals http://www.ops.fhwa.dot.gov/perf_measurement/index.htm Performance Measures - Programs Office of Intermodal Planning and Investment (virginia.gov) Performance Management Under MAP 21/FAST http://www.fhwa.dot.gov/map21/pm.cfm
3	10/17	Reading Regional Transportation Planning – Gian-Claudia Sciara and Susan Handy Caltrans: https://dot.ca.gov/programs/transportation-planning CalSTA: Subject Areas CalSTA California Transportation Commission, California Regional Transportation Plan Guidelines https://catc.ca.gov/programs/transportation-planning Discussion Topics – What planning does the State and Federal government do? What does regional transportation planning look like in the region you live in? What impact do regional issues have on local policies? Are the roles clear? Learn More: USDOT / FHWA – Statewide Transportation Planning http://www.fhwa.dot.gov/planning/processes/statewide/index.cfm Performance for Mobility Hubs: Play6 MTC Mobility Hub Implementation Playbook 4-30-21.pdf (ca.gov) Infrastructure Investment and Jobs Act, 2021. H.R.3684 - 117th Congress (2021-2022): Infrastructure Investment and Jobs Act Congress.gov Library of Congress
4	10/24	Reading Inclusive Transportation: A Manifesto for Repairing Divided Communities by Veronica Davis Roadways for People: Rethinking Transportation Planning and Engineering by Lynn Peterson The Geography of Urban Transportation Fourth Edition by Genevieve Giuliano and Susan Hanson Discussion

		Good outreach – what is on the table? What are you able to hear? Is there such a thing as “good enough”? The power of story telling Project scoping – with whom and how? In class writing assignment Learn More:
5	10/31	Reading Roadways for People: Rethinking Transportation Planning and Engineering by Lynn Peterson The Geography of Urban Transportation Fourth Edition by Genevieve Giuliano and Susan Hanson NEPA - https://www.epa.gov/nepa/national-environmental-policy-act-review-process Discussion – Planning for funding Specialization, planning for operations, modes, freight, ports, aviation, etc National Environmental Protection Act Learn More: The 2022-23 “CA” Budget Transportation Infrastructure Package The 2022-23 Budget: Transportation Infrastructure Package (ca.gov) Overview of State Transportation Funding – CA Legislative Analysts’ Office 2017 https://catc.ca.gov/-/media/ctc-media/documents/fs-trans-funding-overview-031017-a11y.pdf Transportation Funding in California – Caltrans Division of Transportation Planning - Office of Transportation Economics (OTE) – 2018 Transportation Funding in California Caltrans
6	11/07	Reading The Geography of Urban Transportation Fourth Edition by Genevieve Giuliano

		and Susan Hanson Land Use/Population/Employment Forecasting: Search Results Puget Sound Regional Council (psrc.org) ConnectSF-Vision-Report Appendix-C Scenario-Planning-Process.pdf Discussion – Tools of the trade: modeling (benefit/cost), mapping, streetlight and other data, Clipper and Fastrak data Will the past be the trend of the future: scenario planning
7	11/14	Reading Chapter 4 - Roadways for People: Rethinking Transportation Planning and Engineering by Lynn Peterson Review: Autonorama: The Illusory Promise of High-Tech Driving, by Norton, Peter - Amber Woodburn McNair, 2022 (sjlibrary.org) Discussion What is a silo and how many can we bust? Land Use (TOD), public health, sustainability, economic opportunity and workforce The shiny new thing: EV, AV, ebikes, drones and more Dream More: http://www.futuristspeaker.com/future-scenarios/2050-and-the-future-of-transportation/ http://www.gizmag.com/future-transport/22959/ Group project outline due In class writing assignment
8	11/28	Reading Inclusive Transportation: A Manifesto for Repairing Divided Communities by Veronica Davis Roadways for People: Rethinking Transportation Planning and Engineering by Lynn Peterson The Geography of Urban Transportation Fourth Edition by Genevieve Giuliano and Susan Hanson Discussion Managing travel: TDM, parking reform and shuttles

		Project Management: What is the Process? Why is it Important? How is it linked to funding? Why be worried? Learn More: Caltrans Project Development Procedures Manual (PDPM) https://dot.ca.gov/programs/design/manual-project-development-procedures-manual-pdpm Project Management Body of Knowledge (PMBOK) https://www.pmi.org/pmbok-guide-standards ✓ Transportation Data: Transportation System Performance Measurement, Transportation System Management and Management Systems Learn More: Performance Measurement Fundamentals http://www.ops.fhwa.dot.gov/perf_measurement/index.htm Performance Management Under MAP 21/FAST http://www.fhwa.dot.gov/map21/pm.cfm
9	12/05	Reading Inclusive Transportation: A Manifesto for Repairing Divided Communities by Veronica Davis Chapter 6: Roadways for People: Rethinking Transportation Planning and Engineering by Lynn Peterson The Geography of Urban Transportation Fourth Edition by Genevieve Giuliano and Susan Hanson The Future of Transportation Video – Watch in Class - http://www.ted.com/talks/bill_ford_a_future_beyond_traffic_gridlock Dream More: http://www.futuristspeaker.com/future-scenarios/2050-and-the-future-of-transportation/

		http://www.gizmag.com/future-transport/22959/ https://www.youtube.com/results?search_query=future+of+transportation
10	12/12	Presentation of Class Projects – Discussion/Critique Turn in projects before class