San José State University  
Lucas Graduate School of Business  
Master of Science in Transportation Management  
MTM 215: Transportation Planning and Project Development  
Fall-B 2022

Course and Instructor Contact Information

Instructor: Dr. Nick Compin  
Email: talosjaka@yahoo.com (preferred method of contact)  
Office Hours: By appointment  
Class Day/Time: Tuesdays, 5:30-9:30 pm, on Oct. 4, 11, 18, 25; Nov. 1, 8, 15, (No Class on 11/22 Thanksgiving Break), Nov. 29; Dec. 6, 13.  
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://blog.gotomeeting.com/7-rules-virtual-meeting-etiquette-every-professional-know/)

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: 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 my faculty web page at http://www.sjsu.edu/people/firstname.lastname and/or on 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 management of transportation planning and project development processes, including: regional and state system-wide planning; project-level planning; environmental review; obtaining governmental approvals and permits; contract management; and project management.

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
3. Explain how community involvement and environmental review influence planning processes
4. Design effective and feasible performance measurement tools
5. Explain best practices in managing contracts and contractors
6. Explain the basic tenants of project management

Required Texts/Readings

Textbook

There are many on-line sources for this text.

**Other Readings**

Any additional reading will either be publicly available or be provided by the Professor.

**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: session class discussion/current events – each student is expected to bring a current event to each class session and be able to discuss the transportation planning issues it relates to; a team assignment – students will be assigned to teams to research transportation data and present findings to the class; two in-class writing assignments – each student will be expected to complete two, two-page writing assignments to assist students with brainstorming and creating outlines for class papers; two individual class papers – each student will be expected to complete two 5-10 page papers on transportation-related topics; and a course project – students may work individually or in pairs to complete a transportation plan and present it to their classmates.

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 required to e-mail their completed assignments/papers to the instructor. Any technical difficulties encountered should be reported to the instructor immediately. Tentative course calendar including assignment due dates, date of final exam is “subject to change with fair notice”.

**Final Examination or Evaluation**

The course project is due to the instructor on the last day of class (emailed to the professor prior to the start of class at 5:30 PM). Students are also required to make a presentation to the class discussing their course projects during the last class meeting.

Students are allowed to work individually or in groups of two students. If students work in groups, they must describe the roles and responsibilities of each team member in the completion of the project and final report.

All work must be submitted via e-mail to the instructor as an attachment in MS Word or PDF format. All Course Project reports require an Executive Summary and a Table of Contents. 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.

<table>
<thead>
<tr>
<th>Assignments and Other Graded Activities</th>
<th>Due Date</th>
<th>% of Course Grade</th>
<th>Course Learning Objectives Addressed</th>
</tr>
</thead>
<tbody>
<tr>
<td>In-class Writing Assignment #1</td>
<td>10/18/2022</td>
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<tr>
<td>Team Data Assignment #1</td>
<td>10/25/2022</td>
<td>15%</td>
<td>1, 3, 4, 5</td>
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<tr>
<td>In-class Writing Assignment #2</td>
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<tr>
<td>Paper #1</td>
<td>11/01/2022</td>
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<td>1, 2, 4, 5</td>
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<tr>
<td>Paper #2</td>
<td>11/15/2022</td>
<td>20%</td>
<td>1, 2, 3, 4, 5</td>
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<tr>
<td>Course Project/Presentation</td>
<td>12/13/2022</td>
<td>30%</td>
<td>1, 2, 3, 4, 5</td>
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<tr>
<td>Presentation Comments</td>
<td>12/16/2022</td>
<td>5%</td>
<td>1, 2, 3, 4, 5</td>
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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.
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<thead>
<tr>
<th>Percentage</th>
<th>Grade</th>
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<tbody>
<tr>
<td>98% - 100%</td>
<td>A+</td>
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<td>97% - 94%</td>
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<td>93% - 90%</td>
<td>A-</td>
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<td>89% - 87%</td>
<td>B+</td>
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<tr>
<td>86% - 84%</td>
<td>B</td>
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<tr>
<td>83% - 80%</td>
<td>B-</td>
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<tr>
<td>79% - 77%</td>
<td>C+</td>
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<tr>
<td>76% - 74%</td>
<td>C</td>
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<tr>
<td>73% - 70%</td>
<td>C-</td>
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<td>69% - 67%</td>
<td>D+</td>
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<tr>
<td>66% - 64%</td>
<td>D</td>
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<tr>
<td>63% - 60%</td>
<td>D-</td>
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<tr>
<td><strong>below 60%</strong></td>
<td><strong>F</strong></td>
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**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. If necessary, the instructor will provide all information regarding schedule changes in class or by e-mail and through Canvas.*

<table>
<thead>
<tr>
<th>Week</th>
<th>Date</th>
<th>Reading</th>
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| 1    | 10/04 | **Course Overview**  
Student/Instructor Expectations  
Discussion of Class Papers, Assignments and Project  
Transportation Planning in Perspective |
|      |       | I. Setting the Scene - Reading |
|      |       | 1. Introducing Urban Transportation – Susan Handy  
**Discussion** - What makes a region a “good” place to locate? What makes a city a “good” place to locate? If you are not there now, what are the barriers? People and business – same or different? |
|      |       | 2. The Geography of Urban Freight – Laetitia Dablanc and Jean-Paul Rodrigue  
**Discussion** - What is the role of government in goods movement? What about different levels of government? |
| 2    | 10/11 | I. Setting the Scene – Reading  
3. Transformation and Urban Form: Stages in the Spatial Evolution of the American Metropolis – Peter O. Muller  
**Discussion** – Think of a modern city that had its origins hundreds or thousands of years ago. What portions of that early city still remain? What does the transportation system look like today? How does the current transportation system accommodate those early beginnings? |
|      |       | 4. Impact of Information and Communication Technologies – Giovanni Circella and Patricia L. Mokhtarian  
**Discussion** – How do these technologies affect your location and mobility choices now? What about in 20-25 years? Make an educated guess! |
| 3    | 10/18 | II. Planning for Movement Within Cities  
5. Theories and Models in Transportation Planning – Harvey J. Miller  
6. Regional Transportation Planning – Gian-Claudia Sciara and Susan Handy  
**Discussion** – What does regional transportation planning look like in the region you live in? What impact do regional issues have on local policies?  
**Learn More:**  
ISTEA/TEA-21/SAFETEA-LU/MAP-21/FAST Overview: Statewide and Metropolitan Planning Requirements; Elements of the Transportation Planning Process  
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<tr>
<td><strong>II. Planning for Movement Within Cities</strong></td>
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<td>7. Land Use, Travel Behavior, and Disaggregate Travel Data – Marlon G. Boarnet</td>
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<tr>
<td><strong>III. Policy Issues</strong></td>
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<tr>
<td><strong>Discussion</strong> – How do we get more people to use mass transit?</td>
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<td><strong>Learn More:</strong></td>
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<td>Why We Plan for Alternative Modes – The Law</td>
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<td>USC Title 23 - Highways</td>
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<td>Chapter I - FEDERAL HIGHWAY ADMINISTRATION, DEPARTMENT OF TRANSPORTATION (Parts 1 - 973)</td>
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<td>Subchapter E - PLANNING AND RESEARCH (Parts 420 - 470)</td>
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<td>Part 450 - PLANNING ASSISTANCE AND STANDARDS</td>
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<td>Sub Part A-C</td>
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<td>eCFR :: 23 CFR Part 450 -- Planning Assistance and Standards</td>
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<td><strong>Learn More:</strong></td>
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<td>Public Involvement in Transportation Decision Making</td>
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<tr>
<td><strong>III. Policy Issues</strong></td>
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<td>9. Land Use Impact of Transportation Investments – Genevieve Giuliano and Ajay Agarwal</td>
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<td><strong>Discussion</strong> – What came first? The chicken or the egg? How do transportation and land use interact?</td>
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<td><strong>Learn More: Land Use Impacts</strong></td>
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<td>Long Term Land Use Effects of New Rail Investment: Lessons from San Diego 2018</td>
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The great Smart Growth Debate  
http://www.governing.com/topics/transportation-infrastructure/Boys-Sprawl.html

| 6 | 11/08 | III. Policy Issues  
10. The Geography of Urban Transportation Finance - Brian D. Taylor  
**Discussion** – What have been the impacts of SB1? What are the potential future impacts of SB1? What do you think about a VMT tax – Road User Charge Program? How about County sales tax increases where you live?  
11. Transportation and Environmental Impacts and Policy – Scott Le Vine and Martin Lee-Gosselin  
**Learn More: Transportation Finance**  
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  
Transportation Funding in California – Caltrans Division of Transportation Planning - Office of Transportation Economics (OTE) – 2018 Transportation Funding in California | Caltrans  
State Budget 101 Video Series CA State Budget -  
http://www.lao.ca.gov/Videos/player?playlistId=4

| 7 | 11/15 | III. Policy Issues  
12. Transportation and Energy – David L. Greene  
**Discussion** – There is no free lunch, so what do we do?  
13. Social Equity and Urban Transportation – Evelyn Blumenberg  
**Discussion** – How can we address social equity issues? What does “balance” look like?

| 8 | 11/29 | Project Management  
o What is the Process?  
o Why is it Important  
o How is it linked to funding?  
**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

11/15 Final Project Discussion

11/22 No Classes Thanksgiving Week

11/29 See you next Tuesday 11/29

11/15 Paper #2 Due

11/15 Writing Assignment #2
Development of Performance Measures for the FHWA’s Strategic Plan
http://www.fhwa.dot.gov/legsregs/pmeasure.htm

✓ Travel Demand Forecasting
  o What is it?
  o Why is it important?
  o How is done?

Learn More:
Land Use/Population/Employment Forecasting

Search Results | Puget Sound Regional Council (psrc.org)
Click on listed resources to learn more about forecasts.
https://www.fhwa.dot.gov/planning/tmip/

Read to get an idea of what is out there and how they are used!

FYI - For More Information on Integrated Transportation Land Use Models
https://search.usa.gov/search?utf8=%E2%9C%93&affiliate=dot-fhwa&query=integrated+transportation+and+land+use+models

Travel Demand Forecasting
https://video.search.yahoo.com/video/play;_ylt=A2Klo9gZuo5W5vQAzbT7w8QF;_ylu=X3oDMTExdnJhZDlxBHNIyWZczgRzbGsDmlkBHZoawQDQjA5NDcEZ3BwcwMxNQ-?
_t=T+Travel+Demand+Modeling&vid=91e93767f9134d99ebe536fabca48a4&turl=http%3A%2F%2Fwww.youtube.com%2Fwatch%3Fv%3Dh2rX0rZLU&tit=Overview+of+the+four-step+transport+demand+model&c=14&h=225&w=300&l=3364&sigr=11bn8u7i9&sigt=11gkceoh9&sigr=131l6kb05&age=1372226558&fr2=p%3As%2Cv%3Av&fr=yfp-t-695&tt=b
Overview of the four-step transport demand model Video – 42:40

Travel Demand Forecasting: Parameters and Techniques
TPB’s Four-Step Travel Model - Travel Demand Modeling | Metropolitan Washington Council of Governments (mwcog.org)
Activity Based Travel Demand Models: A Primer 2015

*Through Page 16. You are welcome to read the entire document of course. Pay special attention to the concepts behind activity-based modeling.

<table>
<thead>
<tr>
<th>9</th>
<th>12/06</th>
<th>III. Policy Issues</th>
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<tr>
<td></td>
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<td>14. Looking into the Future – Genevieve Giuliano and Susan Hanson</td>
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The Future of Transportation
Video – Watch in Class - http://www.ted.com/talks/bill_ford_a_future_beyond_traffic_gridlock

Dream More:
http://www.gizmag.com/future-transport/22959/
https://www.youtube.com/results?search_query=future+of+transportation

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<th>10</th>
<th>12/13</th>
<th>Presentation of Class Projects – Discussion/Critique</th>
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<tr>
<td></td>
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<td>Turn in projects before class – e-mail time stamp!</td>
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</tbody>
</table>
Turn in Class *Presentation Comments* on 12/16 – These are part of your grade!

**NOTE:**
Class Projects – Due Before Class on 12/13! e-mail me....

Dr. Nick’s e-mail: talosjaka@yahoo.com