

San José State University
Lucas Graduate School of Business
Master of Science in Transportation Management
MTM 215: Transportation Systems Planning & Development
Fall 2017

Course and Instructor Contact Information

Instructor:	Dr. Nick Compin
Office Location:	Contact Instructor
Telephone:	916 653-4575
Email:	talosjaka@yahoo.com
Office Hours:	By appointment
Class Day/Time:	Tuesdays 5:30-9:30 pm Oct. 10, 17, 24, 31 Nov 7, 14, 21, 28 Dec 5, 12
Classroom:	Specified video-conferencing locations (For locations, contact Ms. Viviann Ferea at viviann.ferea@sjsu.edu)
Course website:	Canvas

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 transportation system development interrelationships with land use, environmental management and urban planning. Includes realities of politics, public administration, regulations and financing alternatives. Extends to construction administration including governmental approvals, specification development, contracting law and regulations and fiscal control.

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

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. Use the knowledge gained to propose transportation strategies that have a positive impact on the planning, development, and operation of the surface transportation system in the US.

Required Texts/Readings

Textbook

The Geography of Urban Transportation, Fourth Edition Genevieve Giuliano and Susan Hanson
Guilford Press, 2017 - Science – 400 pages

Other Readings

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

Other technology requirements / equipment / material if any

Current events - gathered each week by students. All other materials for this course will be available on the internet or provided by the instructor.

Library Liaison (Optional)

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

Course Requirements and Assignments

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 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. 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 may be submitted via e-mail to the instructor as an attachment in MS Word or PDF format. Work may also be submitted by mail or hand delivered on or before the due date. All project reports require an Executive Summary and a Table of Contents. Students should clearly identify all of their work with the student’s name and site location on all submitted work.

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 with comments to ensure 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.

Task	% of Course Grade
Paper #1	20%
Paper #2	20%

Task	% of Course Grade
Assignment #1	15%
Class Discussion/Current Events	5%
Course Project/Presentation	40%
Total	100%

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 Assignment, Two Class Papers, and a Course Project.

- **Class Discussion:** Students are expected to have reading 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.
- **Current Events:** As part of the “participation” portion of the class, students are required to bring with them to every class one current event that they may be asked to present to the class.
- **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 and A, but was turned in late, the assigned grade would be a B.

*Extra credit is not available in this course.

Letter grade calculation.

Percentage	Grade
100%-98%	A+
97% - 94%	A
93% - 90%	A-
89% - 87%	B+
86% - 84%	B
83% - 80%	B-
79% - 77%	C+
76% - 74%	C
73% - 70%	C-
69% - 67%	D+
66% - 64%	D

Percentage	Grade
63% - 60%	D-
below 60%	F

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](http://www.sjsu.edu/gup/syllabusinfo/) 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 215 / Transportation Systems Planning & Development, Session A, Fall 2017

This schedule is subject to change with fair notice: e-mail to all of you and alert in class.

Week	Date	Reading
1	10/10	<p>Course Overview Student/Instructor Expectations Discussion of Class Papers, Assignments and Project Transportation Planning in Perspective</p> <p>I. Setting the Scene - Reading 1. The Context of Urban Travel: Concepts and Recent Trends – Susan Handy</p> <p>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?</p> <p>2. The Geography of Urban Freight – Laetitia Dablanc and Jean-Paul Rodrigue</p> <p>Discussion – What is the role of government in goods movement? What about different levels of government?</p>
2	10/17	<p>Meet within your groups to work on Assignment #1.</p> <p><u>Makeup Assignment:</u> Set-up group phone calls with Professor Compin to discuss Data Assignment and Paper #1</p>
3	10/24	<p>I. Setting the Scene - Reading 3. Transformation and Urban Form: Stages in the Spatial Evolution of the American Metropolis – Peter O. Muller</p> <p>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?</p> <p>4. Impact of Information and Communication Technologies – Giovanni Circella and Patricia L. Mokhtarian</p> <p>Discussion – How do these technologies affect your location and mobility choices now? What about in 20-25 years? Make an educated guess!</p> <p>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://ntl.bts.gov/lib/6000/6500/6598/683.pdf</p>
4	10/31	<p>II. Planning for Movement Within Cities 5. Theories and Models in Transportation Planning – Harvey J. Miller</p> <p>6. Regional Transportation Planning – Gian-Claudia Sciara and Susan Handy</p> <p>Discussion – What does regional transportation planning look like in the region you live in? What impact do regional issues have on local policies?</p>

Data Assignment - Discussion

No Class Tonight - We Will Discuss Chapter 3 and 4 Readings Next Week!

Paper #1 Discussion

**Data
Assignment -
Presentation**

**Final Project
Discussion**

**Paper #1
Due**

**Paper #2
Discussion**

		<p>Learn More: ISTEA/TEA-21/SAFETEA-LU/MAP-21/FAST Overview: Statewide and Metropolitan Planning Requirements; Elements of the Transportation Planning Process</p> <p>Code of Federal Regulations (CFR), Statewide Transportation Planning; Metropolitan Transportation Planning Regulations; (23 CFR Parts 450) https://www.gpo.gov/fdsys/granule/CFR-2001-title23-vol1/CFR-2001-title23-vol1-sec450-206</p> <p>USDOT, A Guide to Metropolitan Transportation Planning Under ISTEA - How the Pieces Fit Together - U.S.D.O.T. http://ntl.bts.gov/DOCS/424MTP.html</p> <p>USDOT / FHWA – Statewide Transportation Planning http://www.fhwa.dot.gov/planning/processes/statewide/index.cfm</p> <p>TEA-21 - Transportation Equity Act for the 21st Century A Summary – An Overview http://www.fhwa.dot.gov/tea21/sumover.htm</p> <p>Statewide Planning http://www.fhwa.dot.gov/tea21/factsheets/statepln.htm</p> <p>Metropolitan Planning http://www.fhwa.dot.gov/tea21/factsheets/metropln.htm</p> <p>Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) http://www.fhwa.dot.gov/safetealu/index.htm http://www.fhwa.dot.gov/safetealu/summary.htm</p> <p>MAP-21 - Moving Ahead for Progress in the 21st Century http://www.fhwa.dot.gov/map21/ http://www.fhwa.dot.gov/map21/summaryinfo.cfm</p> <p>FAST – Fixing America’s Surface Transportation http://www.fhwa.dot.gov/fastact/ http://www.dot.ca.gov/hq/transprog/map21/implementation/aashto_sum_fastact_121615v2.pdf</p> <p>California Transportation Commission, California Regional Transportation Plan Guidelines http://www.catc.ca.gov/programs/rtp.htm http://www.dot.ca.gov/hq/tpp/offices/orip/rtp/docs/2017RTPGuidelinesforMPOs.pdf http://www.dot.ca.gov/hq/tpp/offices/orip/rtp/docs/2017RTPGuidelinesforRTPAs.pdf</p>
5	11/7	<p>II. Planning for Movement Within Cities 7. Land Use, Travel Behavior, and Disaggregate Travel Data – Marlon G. Boarnet</p> <p>III. Policy Issues 8. Mass Transit – Lisa Schweitzer</p> <p>Discussion – How do we get more people to use mass transit?</p> <p>Learn More: Why We Plan For Alternative Modes – The Law USC Title 23 - Highways Chapter I - FEDERAL HIGHWAY ADMINISTRATION, DEPARTMENT OF TRANSPORTATION (Parts 1 - 973) Subchapter E - PLANNING AND RESEARCH (Parts 420 - 470) Part 450 - PLANNING ASSISTANCE AND STANDARDS Sub Part A-C http://www.gpo.gov/fdsys/browse/collectionCfr.action?collectionCode=CFR&searchPath=Title+23%2FChapter+I%2FSubchapter+E%2FPart+450&oldPath=Title+23%2FChapter+I%2FSubchapter+E%2FPart+420&isCollapsed=true&selectedYearFrom=2013&ycord=904</p> <p>Learn More: Collaborative Planning/Decision Making (Pages 1-29) http://ntl.bts.gov/DOCS/574.html</p> <p>Public Involvement in Transportation Decision Making http://www.fhwa.dot.gov/planning/public_involvement/index.cfm</p>

		<p>Laws, Requirements and Instruction on Public Involvement http://www.dot.ca.gov/ser/vol1/sec1/ch3public/chap3.htm</p> <hr/> <p style="text-align: center;">Transportation Data: Transportation System Performance Measurement, Transportation System Management and Management Systems</p> <p>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 Development of Performance Measures for the FHWA’s Strategic Plan http://www.fhwa.dot.gov/legsregs/pmeasure.htm</p> <p style="text-align: center;">Travel Demand Forecasting</p> <p>Learn More: Land Use/Population/Employment Forecasting https://www.psrc.org/search?fulltext=forecasting&f%5B0%5D=field_topic%3A12</p> <p><i>Click on listed resources to learn more about forecasts.</i> https://www.fhwa.dot.gov/planning/tmip/</p> <p>Read to get an idea of what is out there! 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+</p> <p>Travel Demand Forecasting https://video.search.yahoo.com/video/play;_ylt=A2KI09gZuo5W5yQAbzT7w8QF;_ylu=X3oDMTExdnJhZDlxBHNIYwNzcgRzbGsDdmlkBHZOaWQDOjA5NDcEZ3BvcwMxNQ--?p=Introduction+To+Travel+Demand+Modeling&vid=91e93767f9134d99ebe536fab4a48a4&turl=http%3A%2F%2Ftse4.mm.bing.net%2Fth%3Fid%3DOVP.V4889e813a73713ea2e95072b30c00746%26pid%3D15.1%26h%3D225%26w%3D300%26c%3D7%26rs%3D1&rurl=https%3A%2F%2Fwww.youtube.com%2Fwatch%3Fv%3Dh2rxC-0rZLU&tit=Overview+of+the+four-step+transport+demand+model&c=14&h=225&w=300&l=3364&sigr=11bn8u7i9&sig=11gkceoh9&sigi=13116kb05&age=1372226558&fr2=p%3As%2Cv%3Av&fr=yfp-t-695&tt=b Overview of the four-step transport demand model-Video – 42:40</p> <p>Four-Step Model of Travel Demand Forecasting http://www.its.uci.edu/its/publications/papers/CASA/UCI-ITS-AS-WP-07-2.pdf</p> <p>Activity Based Travel Demand Models: A Primer 2015 https://r.search.yahoo.com/_ylt=A0SO8xVZ59xZ9rUA9CdXNyoA;_ylu=X3oDMTByYnR1ZmdlBGNvbG8DZ3ExBHBvcwMyBHZOaWQDBHNIYwNzcg--/RV=2/RE=1507678170/RO=10/RU=https%3a%2f%2fplanningtools.transportation.org%2ffiles%2f108.pdf/RK=1/RS=DcmAfZlIbj_XZBJs6mIWk9VWWLzQ- *Through Page 16. You are welcome to read the entire document of course. Pay special attention to the concepts behind activity-based modeling.</p>
6	11/14	<p>III. Policy Issues 9. Land Use Impact of Transportation Investments – Genevieve Giuliano and Ajay Agarwal</p> <p>Discussion – What came first? The chicken or the egg? How do transportation and land use interact?</p> <p>Learn More: Land Use Impacts Boarnet, Marlon G. and Nicholas S. Compin (1999), “Transit-Oriented Development in San Diego County: Incrementally Implementing a Planning Idea,” UCI-ITS-WP-96-7. http://www.its.uci.edu/its/publications/papers/ITS/UCI-ITS-WP-96-7.pdf</p>

		The great Smart Growth Debate Conte, Christopher (2000), "The Boys of Sprawl," Governing Magazine, May. http://www.governing.com/topics/transportation-infrastructure/Boys-Sprawl.html
7	11/21	III. Policy Issues 10. The Geography of Urban Transportation Finance - Brian D. Taylor Discussion – What are potential impacts of SB1? What if I is nullified/repealed? What do you think about a VMT tax – Road User Change Program? What if the voters will not approve? 11. Transportation and Environmental Impacts and Policy – Scott Le Vine and Martin Lee-Gosselin Learn More: Transportation Finance Overview of Transportation Funding – CA Legislative Analyst’s Office http://www.lao.ca.gov/handouts/transportation/2015/Transportation-Funding-022315.pdf Transportation Funding in California – Caltrans Division of Transportation Planning - Office of Transportation Economics (OTE) – 2015 http://www.dot.ca.gov/hq/tpp/offices/eab/fundchrt_files/Transportation_Funding_in_CA_New.pdf State Budget 101 Video Series CA State Budget - http://www.lao.ca.gov/Videos/player?playlistId=4
8	11/28	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?
9	12/5	III. Policy Issues 14. Looking into the Future – 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/ http://dailyreckoning.com/the-future-of-transportation/ https://www.youtube.com/results?search_query=future+of+transportation
10	12/12	Presentation of Class Projects – Discussion/Critique Turn in projects before class – e-mail time stamp!

**Paper #2
Due**

**Class Projects - Due Before
Class!!!!
e-mail me....**

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