San José State University  
Lucas Graduate School of Business  
Master of Science in Transportation Management  
MTM 201: Transportation Systems and Society  
Fall-A 2020

Course and Instructor Contact Information

Instructor: Dr. Kevin Fang  
Office Location: Contact instructor  
Email: fangk@sonoma.edu  
Office Hours: By appointment  
Class Day/Time: Wednesdays, 5:30 – 9:30 pm, on August 5, August 12, August 19, August 26, September 2, September 9, September 16, September 23, September 30, and October 7  
Classroom: Online (Zoom) or specified video-conferencing locations  
(For locations, contact MSTM Coordinator Michelle Waldron)  
See Canvas for class login information  
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 by going in person to one of the MTM program videoconferencing sites *or* by joining online using Zoom, SJSU’s online meeting application. Details on each option are as follows:

MTM Class Videoconferencing Sites:

Videoconference sites are located at the Lucas Business Complex (Santa Clara, CA), Caltrans district offices, and other participating agencies. For information about these options, contact the MSTM Program Coordinator, Michelle Waldron, at michelle.waldron@sjsu.edu.

Online Access via Zoom:

You can join class using SJSU Zoom from any location, as long as you:

- Are 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: https://sjsu.zoom.us/meeting/tJEucuCgqDMqHdJMg-9lzh9IWMhOwAvQDq?icsToken=98tyKuCtrT4jEtKdsB6BRRowMA4_4Xzwplxfgqdd3sRioWgIaeveH9V0H7pQB_nG

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

**Course Description**

Core transportation knowledge and systems thinking. Characteristics of travel modes and infrastructural elements that produce transportation systems; public, private, and nonprofit actors involved in transportation; transportation systems as levers toward achieving economic vitality, social equity, environmental sustainability, and community goals; and key challenges transportation system managers will face in the coming decade. Note: this course satisfies the GWAR for the MSTM program.

**Lucas College and Graduate School of Business Program Learning Goals**

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

**Goal 1:** Business Knowledge: Understand basic business principles and demonstrate discipline-specific competencies as applied to local and global environments.

**Goal 2:** Communication: Communicate ideas clearly, logically, and persuasively in oral and written format, using technology appropriately.

**Goal 3:** Ethical Awareness: Recognize, analyze, and articulate solutions to ethical issues that arise in business.

**Goal 4:** Leadership, Teams and Diversity: Comprehend the challenges and opportunities of leading and working in diverse teams and environments.

**Goal 5:** Critical Thinking: Comprehend, analyze, and critically evaluate complex and unstructured qualitative and quantitative business problems, using appropriate tools and technology.

**Goal 6:** Innovation: Recognize, analyze, and articulate strategies for promoting creativity and innovation.

**MSTM Program Learning Goals:**

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

**Goal 1:** Transportation Systems and Society: Develop a systems-savvy and global perspective on solving transportation management challenges
Goal 2: **Transportation Policy:** Develop solutions to transportation management challenges that integrate knowledge of the transportation policy environment

Goal 3: **Leadership:** Identify and analyze leadership styles and traits

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**

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

1. Describe the primary modes of transportation and their functions, current levels of use, and likely levels of use in the future

2. Explain how “the transportation system” functions as interacting systems of infrastructure, services, and travel modes

3. Explain how transportation system performance is influenced by natural and man-made environments

4. Explain how transportation systems serve as tools to achieve fundamental social goals such as equity, economic vitality, and environmental health

5. Describe the roles of the many actors in the “transportation ecosystem,” including public agencies from the local to federal and international levels, private sectors firms providing transportation services and infrastructure, and individual travelers and shippers

6. Describe the key challenges facing transportation managers in the coming decade, including automated/connected, shared, and electric vehicles, and management strategies to respond to this new world

7. Describe the importance of innovation in technology and in organizational management practices in the transportation sector

8. Use library and online resources to identify relevant professional and scholarly literature on transportation topics

**Required Texts/Readings**

**Free e-textbook**

We will utilize the following text:


This is available as a free e-book through the SJSU library website. If you’d like to purchase a hard copy of the text, used copies start at around $30.

**Writing Handbook**

Students must purchase one required text:

Kate L. Turabian. *A Manual for Writers of Research Papers, Theses, and Dissertations.* 9th ed. Chicago:
Article Readings
Additional readings will be posted as links (see Course Schedule below or Canvas) or posted to the Files section of the course Canvas site.

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

Course Requirements and Assignments
This course is taught as a seminar. Students are expected to engage with the course material and participate in class discussions. Please be respectful of your classmates during class and be aware of what is captured by your camera and microphone. Students course grades will be based on the sum of the following assignments:

Term Paper
The major assignment for the class is a term paper on a transportation management issue. Students will explore what scholarly research tells us about a transportation problem and potential solutions to that problem. Students will complete this assignment in three steps: a short sketch of the paper and two drafts. After the sketch and first draft, students will receive feedback from the instructor or their peers. Detailed instructions for each portion of the assignment will be shared on Canvas and discussed in class.

Term Papers should be about 3,000 words, exclusive of the bibliography and any appendices.

MTM 201 is a 3-unit course that satisfies the Graduation Writing Assessment Requirement (GWAR). To satisfy the GWAR requirement, students must receive at least a “C” grade on the final draft of the term paper. Students who receive a grade below “C” for this part of the course will not meet the GWAR requirement, even if their overall grade for the course is higher. Please check with the instructor or MSTM Program Director if you are unclear about these requirements.

Streets of the Future Assignment and Travel Behavior Interviews
Early in the semester will be two small assignments where students will do some pre-class search to setup in-class discussions. In the first assignment, students will look at examples of streets around the world and over time and explore the role of streets in society. In the second assignment, students will conduct two informal interviews to explore individual decision-making in transportation.

Transportation News Presentations
Students will bring in interesting examples from transportation current events in the form of short presentations. Several of these will occur each week in the second half of the course.

Final Exam
Students will complete a final exam on the last day of class which will evaluate student’s comprehension of the material covered over the whole session.
Grading Information

The course assignments will be weighted as follows:

<table>
<thead>
<tr>
<th>Task</th>
<th>% of Course Grade</th>
<th>Learning Objectives Addressed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Term Paper – Sketch/Peer Review</td>
<td>3%</td>
<td>2, 3, 4, 5, 8</td>
</tr>
<tr>
<td>Term Paper – First Draft</td>
<td>6%</td>
<td>2, 3, 4, 5, 8</td>
</tr>
<tr>
<td>Term Paper – Second Draft</td>
<td>35%</td>
<td>2, 3, 4, 5, 8</td>
</tr>
<tr>
<td>Streets of the World Assignment</td>
<td>6%</td>
<td>1, 2, 3, 4, 8</td>
</tr>
<tr>
<td>Travel Behavior Interview Assignment</td>
<td>6%</td>
<td>1, 3, 4, 5</td>
</tr>
<tr>
<td>Transportation News Presentations</td>
<td>9%</td>
<td>2, 3, 4, 5, 6, 7</td>
</tr>
<tr>
<td>Final exam</td>
<td>35%</td>
<td>1, 2, 3, 4, 5, 6, 7</td>
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Determination of Grades

Letter grades for the course will assigned based on the cumulative total of points earned on assignments and the final exam according to the following table:

<table>
<thead>
<tr>
<th>Final grade determination</th>
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<tbody>
<tr>
<td>Percentage</td>
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<tr>
<td>93.33% and above</td>
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<tr>
<td>93.33% to 89.5%</td>
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<td>89.5% to 86.67%</td>
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<td>86.67% to 83.33%</td>
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<td>83.33% to 79.5%</td>
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<td>79.5% to 76.66%</td>
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<td>66.66% to 63.33%</td>
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<td>63.33% to 59.5%</td>
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<td>below 59.5%</td>
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Late papers

Late papers will are accepted with a 10% deduction once late, plus an additional 5% deduction per additional business day an assignment is late, with a maximum deduction of 40%.
University Policies

Per University Policy S16-9 (http://www.sjsu.edu/senate/docs/S16-9.pdf), information relevant to all courses, such as academic integrity, accommodations, dropping and adding, consent for recording of class, etc. is available on Office of Graduate and Undergraduate Programs’ Syllabus Information web page at http://www.sjsu.edu/gup/syllabusinfo/.” Make sure to visit this page, review, and be familiar with these university policies and resources.

Course Schedule

Note: This schedule is subject to change with fair notice. Changes will be noted in class and via email.

Assignment Due Dates

Streets of the World assignment
Wednesday, August 12 (by the start of class)

Travel Behavior assignment
Wednesday, August 26 (by the start of class)

Transportation News Presentations
Multiple dates. Presentation slots each class between Week 5 and Week 10.

Term Paper
Sketch (1-2 pages): Wednesday, September 2 (by the start of class)
First draft: Sunday, September 13 (by 11:59pm)
Second draft: Friday, October 9 (by 11:59pm)

Final Exam
Wednesday, October 7 (during class)

Class 1 – Wednesday, August 5

Introductions
Transportation Basics
Key societal trends

Readings
- Tumlin (2012) – Sustainable Transportation Planning
  Chapter 1: Introduction
  Chapter 2: Sustainable Transportation (Pages 7-14)
Class 2 – Wednesday, August 12

GWAR Assignment, Part 1: Introduction to the assignment
Transportation-Land Use Connection
Discussion: Streets of the world

- Tumlin (2012) – Sustainable Transportation Planning
  Chapter 5: Streets

Class 3 – Wednesday, August 19

Travel Behavior and Trends
GWAR Assignment, Part 2: Finding and Accessing Library Resources
Transportation Externalities: Natural environment

- Tumlin (2012) – Sustainable Transportation Planning
  Chapter 2: Sustainable Transportation (Pages 15-22)
  Chapter 3: Transportation and Public Health

For reference

Class 4 – Wednesday, August 26

GWAR Assignment, Part 3: Citations
Transportation Externalities: Safety
Discussion: Travel behavior interviews

Class 5 – Wednesday, September 2

GWAR Assignment, Part 4: Peer Review Activity
Congestion
Transportation Externalities: Road Building

- Tumlin (2012) – Sustainable Transportation Planning
  Chapter 9: Motor Vehicles
  Chapter 10: Parking

Class 6 – Wednesday, September 9

Transit

- Tumlin (2012) – Sustainable Transportation Planning
  Chapter 8: Transit

Class 7 – Wednesday, September 16

Active Transportation

- Tumlin (2012) – Sustainable Transportation Planning
  Chapter 6: Pedestrians
  Chapter 7: Bicyclists

Class 8 – Wednesday, September 23

Transportation Revolutions, Electric Vehicle
More on Transit
Class 9 – Wednesday, September 30

Transportation Revolutions, Part 2: Ridehailing and Autonomous Vehicles

- Tumlin (2012) – Sustainable Transportation Planning
  Chapter 4: The City of the Future

Class 10 – Wednesday, October 7

**Final Exam**
TBA  
Course wrap-up discussion