San José State University
Lucas Graduate School of Business
Master of Science in Transportation Management
MTM 250 – Transportation and the Environment
Fall B - 2018

Course and Instructor Contact Information

Instructor: Joseph Kott, PhD, AICP, PTP
Office Location: 210 N. Fourth Street, 4th Floor
Telephone: 650-814-0961
Email: Joseph Kott, PhD, AICP, PTP
Office Hours: By appointment
Class Day/Time: Mondays, 5:30 pm – 9:30 pm
Classroom: Join class at specified video-conferencing locations or via SJSU’s online Zoom videoconferencing

(For in-person class locations, contact the MSTM Program Coordinator, Michelle Waldron, at michelle.waldron@sjsu.edu.)

For those who use Zoom, the meeting URL is as follows:
https://sjsu.zoom.us/j/254575625

Course website: SJSU Canvas site for MTM 250, Fall B 2018

Course Format

Attending Class Sessions

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.

MTM Class Videoconferencing Sites:
Videoconference sites are located at the SJSU Lucas School of Business, Caltrans district offices, and at other participating agencies. For information about these options, contact the 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/](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/j/254575625

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](http://www.sjsu.edu/ecampus/teaching-tools/zoom/index.html)

**Other Matters**

Course materials such as syllabus, handouts, notes, and assignment instructions can be found on the course site on SJSU Canvas. You are responsible for regularly checking this site to learn of any updates.

Students must have regular access to email and the internet to communicate with the instructor, submit assignments, and engage in other class activities.

Students attend class sessions via live video conferencing at the site most convenient to them, with sites at the San Jose State Lucas Graduate School of Business, 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**

Students will be introduced to the complexities in the relationship of transportation and the environment. An important theme of this class is that real world trade-offs are inherent in addressing transportation as an important cause of environmental degradation. Solutions considered have technical, socio-economic, and cultural impediments. Students will learn from case studies of success in creating more environmentally-benign
forms of access and mobility. Students will contribute their own ideas in class discussions and a term paper on innovation in transportation policy to address environmental concerns.

MSTM Program Goals:

**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

Upon completion of the course, students will be able to do the following:

1. Explain the connection between transportation system, air quality, water quality, human health, and the livability of communities.
2. Describe how motorized transportation, despite its many social and economic benefits, comes at the cost of environmental (and, arguably, socio-economic) sustainability.
3. Discuss the importance of land use in relation to the environmental impacts of transportation.
4. Explain the concept of environmental justice as it applies to the effects of transport system.
5. Evaluate the effectiveness of a variety of measures to reduce the environmental impacts of transport.
6. Envision policy innovations that point the way to more sustainable transport systems, cleaner air and water, more livable communities, and hence more sustainable cities and regions.
7. Evaluate the relationship between our transportation systems, natural resources, urban land use, and human health and well-being.

Required Texts/Readings

Textbooks

Course readings will consist of two reports be purchased online in hard copy form. may be downloaded from the MTM 250 class site on Canvas in pdf format.


**Other Readings**

All the articles and one of the reports above will be uploaded to the course website for students to download. All course materials will be accessible to the extent possible. If you have any questions or concerns about the accessibility of course readings and other course-related materials, please contact the instructor as soon as possible so that your needs can be met.


**Library Liaison**

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

**Course Requirements and Assignments**

Students are required to complete several assignments in MTM 250. These included two Reading Memos, a Mid-term Examination, a Final Examination, and a Term Paper. Timely completion of these assignments is expected of all students. Class participation is highly encouraged.

**Reading Memos**

These will cover readings for the past three weeks, including the week of the class by which the Reading Memo is due. I will look for evidence that you have not only done the readings but have reflected on their meaning. While you are free to agree or disagree with the author(s), I hope to see that you have added value to your reading through interpretation and discussion of what you have learned. I expect that these Reading Memos will not be longer than 2 pages, either double-spaced or with a space and a half between lines. Either 11-point or 12-point font is acceptable. These Reading Memos support all seven MTM 250 Learning Outcomes since they pertain collectively to all the subject matter in the course.

**Term Paper**

This comprises a term paper on one of the topics listed below. If you wish to write your term paper on another topic, discuss your idea with me in advance. The Term Paper will present an argument or thesis you wish to develop, the evidence for your position, and the implications for policy. Each paper should have a bibliography of readings upon which your work was based. These papers will typically be from 15 to 20 pages in length. The Term Paper will support one or more of the seven MTM 250 Learning Outcomes, the specific one(s) depending on Term Paper topic chosen.

The list of topics from which to choose is as follows:

- Low or no emissions vehicles: Alternatives and prospects
- Urban planning and design measures to reduce transportation-related air and water pollution
- Transit-oriented development
- Green streets, green parking lots: Applicability and prospects
- Issues in adaptation of the transportation system in response to climate change
Car-free streets, districts, and cities: Examples and prospects
Peak oil: Evidence and implications
Post-carbon cities and regions: Alternatives and prospects
Replacing physical travel with virtual presence: Examples and prospects
Water pollution emissions from the transportation sector: Evidence and mitigation
The health effects of transportation-related air emissions
Ways to reduce the carbon footprint of travel by personal motor vehicle
Public transit for livable cities: Bus rapid transit (BRT), light rail, streetcars, commuter rail, and metro systems
Environmental justice implications of urban and regional transport policy

Students may select and research another topic with prior approval of the instructor.

Mid-Term Examination
The Mid-Term Examination will cover MTM 250 course material for the first half of the course. Students will choose four (4) out of six (6) Mid-Term Examination questions to answer. The answer to each question should be no more than one (1) to two (2) pages in length. The Mid-Term Examination will be available on the MTM 250 class site on Canvas. The Mid-Term Examination will support one or more of the seven MTM 250 Learning Outcomes, the specific one(s) depending on questions chosen.

Final Examination
Final Examination will cover MTM 250 course material for entire course but will emphasize material presented in the second half of the course. Students will choose four (4) out of six (6) Final Examination questions to answer. The answer to each question should be no more than one (1) to two (2) pages in length. The Final Examination will be available on the MTM 250 class site on Canvas. The Final Examination will support one or more of the seven MTM 250 Learning Outcomes, the specific one(s) depending on questions chosen.

Citation style
It is important to properly cite any references you use in your assignments. There are several good options, including American Psychological Association (APA) Publication Manual, Sixth Edition, the Modern Language Association (MLA) Style Manual and Guide, and the Chicago Manual of Style. The Purdue University Online Writing Lab (Purdue OWL) has excellent condensed guides to each citation method. See https://owl.english.purdue.edu/owl/section/2/ for more information.

Grading Information
Grading rubrics will be posted on Canvas at least two (2) weeks before the due date for each assignment except for the Term Paper. The rubric for the Term Paper will be posted on Canvas at least four (4) weeks before the due date.
<table>
<thead>
<tr>
<th>Task</th>
<th>% of Course Grade</th>
<th>Course Learning Objective(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MID-TERM EXAM</td>
<td>20%</td>
<td>CLO 1,2,4,5,6, and 7</td>
</tr>
<tr>
<td>FINAL EXAM</td>
<td>20%</td>
<td>CLO 1,2,3,4,5,6, and 7</td>
</tr>
<tr>
<td>TERM PAPER</td>
<td>40%</td>
<td>One or more of the 7 MTM 250 CLOs</td>
</tr>
<tr>
<td>READING MEMO #1</td>
<td>10%</td>
<td>CLO 1,2,4,5,6, and 7</td>
</tr>
<tr>
<td>READING MEMO #2</td>
<td>10%</td>
<td>CLO 1,2,3,4,5,6 and 7</td>
</tr>
<tr>
<td>TOTAL</td>
<td>100%</td>
<td></td>
</tr>
</tbody>
</table>

**Determination of Grades**

- The letter grade calculation is shown in the table below:

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Grade</th>
</tr>
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<tbody>
<tr>
<td>94% and above</td>
<td>A</td>
</tr>
<tr>
<td>90% - 93%</td>
<td>A-</td>
</tr>
<tr>
<td>87% - 89%</td>
<td>B+</td>
</tr>
<tr>
<td>84% - 86%</td>
<td>B</td>
</tr>
<tr>
<td>80% - 83%</td>
<td>B-</td>
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<tr>
<td>77% - 79%</td>
<td>C+</td>
</tr>
<tr>
<td>73% - 76%</td>
<td>C</td>
</tr>
<tr>
<td>70% - 72%</td>
<td>C-</td>
</tr>
<tr>
<td>67% - 69%</td>
<td>D+</td>
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<tr>
<td>63% - 66%</td>
<td>D</td>
</tr>
<tr>
<td>60% - 62%</td>
<td>D-</td>
</tr>
<tr>
<td>below 60%</td>
<td>F</td>
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</tbody>
</table>

Students who keep up with the readings will benefit most from the course.

**Other Grading/assignment issues**

Late assignments (those turned in after the due date) will not be accepted for full credit unless students have a compelling reason, for example illness or family emergency. A 10% grade reduction will be applied for assignments turned in up to 24 hours late, 20% for the second 24 hours late, and 30% for the third 24-hour period late. After that, no assignment will be accepted without a compelling reason for the lateness. If you
expect you will not be able to complete an assignment on time and you let me know well before the due date, it may be possible to make alternative arrangements that will reduce the grade penalty for lateness.

**Grading Rubrics**

*Reading Memo -*

Demonstrates

1) that the student’s answer was informed (up to 3.75 points);
2) and pertinent (up to 3.75 points).
   = up to 7.5 points.
3) that the student’s answer was logical (up to 1.25 points);
4) and well-written (up to 1.25 points).
   = up to 2.5 points.

*Mid-Term Examination -*

For Each Question Answered:

Demonstrates

1) that the student’s answer was informed (up to 1.75 points);
2) and pertinent (up to 1.75 points).
   = up to 3.5 points.
3) that the student’s answer was logical (up to 0.75 points);
4) and well-written (up to 0.75 points)
   = up to 1.5 points.

*Final Examination –*

For Each Question Answered:

Demonstrates

1) That the student answer was well-informed (up to 1.5 points);
2) and pertinent (up to 1.5 points).
   = up to 3.0 points.
3) That the student answer was logical (up to 0.5 points);
4) and well-written (up to 0.5 points).
   = up to 1.0 points.

*Term Paper –*

Demonstrates

1) That the student paper was informed (up to 15 points);
2) and well-researched (up to 15 points).
   = up to 30.0 points.
3) That the student paper was well-organized (up to 2.5 points),
4) And well-written (up to 7.5 points). 
   = up to 10.0 points.

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 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.
# Week-By-Week Course Schedule

## MTM 250: Transportation and the Environment - Fall B 2017

The course schedule listed below is tentative and it is likely that it will be updated as the course progresses. Assignment deadlines, however, are unlikely to change.

<table>
<thead>
<tr>
<th>Date (Semester Week)</th>
<th>Topic</th>
<th>Readings</th>
<th>Assignments Due</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oct 10 (Week 1)</td>
<td>Introductions; Course Overview; Viewing the Film <em>Sprawling from Grace</em></td>
<td></td>
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</tr>
<tr>
<td>Date (Semester Week)</td>
<td>Topic</td>
<td>Readings</td>
<td>Assignments Due</td>
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<td></td>
<td>Air Pollution from Ground Transportation</td>
<td>Video clips on <em>Banff Wildlife Crossing, Highway Crossing Structures for Wildlife in Utah, Animal Bridges: Lifesaving Wildlife Crossings, and China’s Toxic Smog Problem</em> Quiz #1 (take home) uploaded to Canvas</td>
<td></td>
</tr>
<tr>
<td>Date (Semester Week)</td>
<td>Topic</td>
<td>Readings</td>
<td>Assignments Due</td>
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<tr>
<td>November 21 (Week 7)</td>
<td>THANKSGIVING WEEK – NO CLASS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Date (Semester Week)</td>
<td>Topic</td>
<td>Readings</td>
<td>Assignments Due</td>
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<tr>
<td>December 19 (Week 11)</td>
<td>Summing Up</td>
<td>Review of Course Readings</td>
<td><em>Term Paper Due</em> on Wednesday, December 19, 2018 by 11:59 pm via upload to MTM 250 site on SJSU Canvas</td>
</tr>
</tbody>
</table>

**Disclaimer**

This syllabus is intended as a class guide and is designed to be as accurate as possible. It is likely, however, that this syllabus may change during the semester as class needs change. Any changes will be discussed in class with as much notice as possible. Since our course only meets once per week, e-mail and the class web site in Canvas will be used as the primary form of communication. If you have difficulty with e-mail, or limited access, please let me know so that we can arrange an alternative means of communication.