

**San José State University**  
**Lucas Graduate School of Business**  
**Master of Science in Transportation Management**  
**MTM 260: Project Management for Transportation**  
**Fall-B 2024**

**Course and Instructor Contact Information**

<b>Instructor:</b>	Nigel Blampied
<b>Email:</b>	<a href="mailto:nigel.blampied@sjsu.edu">nigel.blampied@sjsu.edu</a>
<b>Office Hours:</b>	By appointment. Please find a free time on my SJSU Google calendar at least 48 hours ahead, and send an invitation.
<b>Class Day/Time:</b>	Mondays, 5:30 - 9:30 pm (Pacific), September 30 - December 9, 2024, excluding November 11.
<b>Classroom:</b>	All classes held on Zoom
<b>Grading rules:</b>	Normal grade rules apply
<b>Units:</b>	3
<b>Course website:</b>	Canvas ( <a href="http://sjsu.instructure.com">http://sjsu.instructure.com</a> )

**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 will join class using Zoom. 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"

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 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

Reviews the generally recognized good practices for the management of projects, programs, and portfolios, as laid out by the Project Management Institute (PMI) and the International Organization for Standardization (ISO). Considers whether and how those practices apply in transportation. Compares project management practices in the US transportation industry to practices in other industries, such as software engineering, and to practices in other countries. Students will examine in depth the use of a selected practice in an organization of their choice.

## Course Learning Outcomes

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

1. Explain the distinction between project management, program management, and portfolio management.
2. Describe how management approaches differ between project management, program management, and portfolio management.
3. Describe the five standard project management process groups and the ten standard project management knowledge areas and how they are used in projects.
4. Perform basic project scheduling and estimating.
5. Describe the five standard program management performance domains and how they are used in project programs.
6. Describe the six standard portfolio management performance domains and how they are used in project portfolios.
7. Translate the project development terms used in transportation agencies into standard project management terms, and vice versa.
8. Identify how transportation projects are similar to and different from projects defined in the American National and International Standards.
9. Use library and online resources to expand upon the standards and develop an understanding of the state of the art of selected knowledge areas and performance domains in transportation organizations.
10. Evaluate the application of selected knowledge areas and performance domains in a transportation organization.

## MSTM Program Goals

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

**Goal One: Management of Transportation Organizations:** Develop a systems-savvy and global perspective on solving transportation management challenges

**Goal Two: Transportation Policy:** Develop solutions to transportation management challenges that integrate knowledge of the transportation policy environment

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

**Goal Four: Communication Skills:** Communicate effectively with a diverse workforce and citizenry

**Goal Five: Analytical Skills:** Identify and evaluate transportation management issues using appropriate data and methods

## Required Texts/Readings

Readings for this course are available online through library.sjsu.edu using your SJSU log-on or on the Internet. You might also qualify for student membership in the Project Management Institute, for \$32, which would allow you to download .pdf copies of the PMI documents below.

### Required reading

Blampied N, Buttrick R, Jucan G, Piney C, Stevens C, Violette D, and Wideman RM. (2023). In Search of Project Management Principles. *Project Management Journal*. Dec 1; 54(6).

PMI. (2017a). *The Standard for Project Management*. ANSI/PMI 99-001-2017. Published as Part 2 of PMI 2017a below. Project Management Institute. ISBN: 978-1-62825-184-5

PMI. (2024). *The Standard for Program Management – Fifth Edition*. ANSI/PMI 08-002-2024. Project Management Institute. ISBN: 978-1-62825-814-1

PMI. (2017b). *The Standard for Portfolio Management – Fourth Edition*. ANSI/PMI 08-003-2017. Project Management Institute. ISBN: 978-1-62825-197-5

PMI. (2017c). *A Guide to the Project Management Body of Knowledge (PMBOK® Guide), Sixth Edition*. Project Management Institute. ISBN: 978-1-62825-184-5

PMI. (2019a). *Practice Standard for Work Breakdown Structures – Third Edition*. Project Management Institute. ISBN: ISBN: 978-1-62825-619-2

PMI. (2019b). *The Standard for Risk Management in Portfolios, Programs, and Projects*. Project Management Institute. ISBN: 978-1-62825-565-2

PMI. (2019c). *Practice Standard for Scheduling – Third Edition*. Project Management Institute. ISBN: 978-1-62825-561-4

PMI. (2019d). *Practice Standard for Project Estimating – Second Edition*. Project Management Institute. ISBN: 978-1-62825-642-0

### Student-selected reading

Academic papers selected by students for their term projects through systematic searches of databases such as Scopus, Proquest Dissertations and Theses, and the Transportation Research Board's TRID database.

### Optional supplemental reading

Anderson, S., Molenaar, K., and Schexnayder, C. (2007). *Guidance for Cost Estimation and Management for Highway Projects During Planning, Programming, and Preconstruction, National Cooperative Highways*

*Research Program Report 574*, Transportation Research Board. Available at <http://www.trb.org/Publications/Blurbs/158464.aspx>

- Anderson, S., Molenaar, K., and Schexnayder, C. (2009). *Procedures Guide for Right-of-Way Cost Estimation and Cost Management*, National Cooperative Highways Research Program Report 625, Transportation Research Board. Available at <http://www.trb.org/Main/Blurbs/162271.aspx>
- ISO. (2022a). *Project, programme and portfolio management -- Guidance on portfolio management*, ISO 21504:2022. International Organization for Standardization.
- ISO. (2022b). *Project, programme and portfolio management -- Guidance on programme management*, ISO 21503:2022. International Organization for Standardization.
- ISO. (2017). *Project, programme and portfolio management -- Guidance on governance*, ISO 21505:2017, International Organization for Standardization.
- ISO. (2018a). *Earned value management in project and programme management*, ISO 21508:2018. International Organization for Standardization.
- ISO. (2018b). *Work breakdown structures for project and programme management*, ISO 21511:2018. International Organization for Standardization.
- ISO. (2018c). *Project, programme and portfolio management – Vocabulary*, ISO/TR 21506:2018. International Organization for Standardization.
- ISO. (2020). *Guidance on project management*, ISO 21502:2020. International Organization for Standardization,
- Marshall, K. R., and Rousey, S. 2009. *Guidance for Transportation Project Management*. Transportation Research Board. <https://doi.org/10.17226/23028>.
- PMI. (2006). *Government Extension to the PMBOK® Guide – Third Edition*. Project Management Institute. ISBN: 978-1-930699-91-5
- PMI. (2013a). *Organizational Project Management Maturity Model – Third Edition*. ANSI/PMI 08-004-2013. Project Management Institute. ISBN: 978-1-935589-70-9
- PMI. (2013b). *Managing Change in Organizations: A Practice Guide*. Project Management Institute. ISBN: 978-1-62825-015-2
- PMI. (2013c). *Software Extension to the PMBOK® Guide – Fifth Edition*. Project Management Institute. ISBN: 978-1-62825-013-8
- PMI. (2014a). *Implementing Organizational Project Management: A Practice Guide*. Project Management Institute. ISBN: 978-1-62825-035-0
- PMI. (2014b). *Navigating Complexity: A Practice Guide*. Project Management Institute. ISBN: 978-1-62825-036-7
- PMI. (2015). *Business Analysis for Practitioners: A Practice Guide*. Project Management Institute, PA. ISBN: 978-1-62825-069-5
- PMI. (2016a). *Construction Extension to the PMBOK® Guide*. Project Management Institute. ISBN: 978-1-62825-090-9
- PMI. (2016b). *Governance of Portfolios, Programs, and Projects: A Practice Guide*. Project Management Institute. ISBN: 978-1-62825-088-6

- PMI. (2016c). *Requirements Management: A Practice Guide*. Project Management Institute. ISBN: 978-1-62825-089-3
- PMI. (2017d). *Agile Practice Guide*. Published with PMI 2017a above. Project Management Institute. ISBN: 978-1-62825-199-9
- PMI. (2017e). *PMI Guide to Business Analysis*. Project Management Institute. ISBN: 978-1-62825-198-2
- PMI. (2017f). *Project Manager Competency Development Framework – Third Edition* Project Management Institute. ISBN: 978-1-62825-091-6
- PMI. (2018). *The Standard for Organizational Project Management*. Project Management Institute. ISBN: 978-1-62825-200-2
- PMI. (2019e). *The Standard for Earned Value Management*. Project Management Institute. ISBN: 978-1-62825-638-3
- PMI. (2021). *The Standard for Project Management*. ANSI/PMI 99-001-2021. Project Management Institute. ISBN: 978-1-62825-664-2
- Shane, J.S., Gransberg, D.D., and Strong, K.C. (2014). *Project Management Strategies for Complex Projects, Report S2-R10-RW-1*. Transportation Research Board. Available from <https://www.nap.edu/catalog/22755/guide-to-project-management-strategies-for-complex-projects>
- Shane, J.S., Strong, K.C., and Gransberg, D.D. (2013). *Guide to Project Management Strategies for Complex Projects, Report S2-R10-RW-2*. Transportation Research Board. Available from <http://www.trb.org/Publications/Blurbs/167482.aspx>
- Trauner Consulting Services. (2007). *Innovative Procurement Practices: Alternative Procurement and Contracting Methods, contract No. 53A0104, Task 3.2 and 3.3*. Prepared for California Department of Transportation, May 9, 2007.
- US Department of Defense. (2003). *Extension to A Guide to the Project Management Body of Knowledge (PMBOK® Guide) – First Edition, version 1.0*. Defense Acquisition University Press. Available from <https://permanent.access.gpo.gov/lps44091/DoDExtPMBOK--June+03.pdf>

## Citation Style and File Name Convention

It is important to properly cite any references you use in your assignments. For this class, use the American Psychological Association (APA) citation style, which is a version of the Author-Date Style described in Kate Turabian's *A Manual for Writers of Research Papers, Theses, and Dissertations*, 9th edition. See <https://apastyle.apa.org/>.

## Library Liaison

The Library Liaison for the Lucas Graduate School of Business is Christa Bailey ([christa.bailey@sjsu.edu](mailto: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, including but not limited to internships, labs, and clinical practica. Other course structures will have equivalent workload expectations as described in the syllabus.

These course requirements and assignments conform to the details found from University Syllabus Policy S16-9 at <http://www.sjsu.edu/senate/docs/S16-9.pdf>.

*Research Assignment:* Students will prepare a paper on a selected project, program, or portfolio management process group, knowledge area, or performance domain in an organization of their choice. The final paper should be between 5,000 and 7,500 words, 12 point, 1.5 spaced, and should:

1. Begin with an executive summary.
2. Introduce your topic.
3. Describe the current practice in the organization.
4. Review at least ten sources that address the selected process group, knowledge area, or performance domain. These should include sources from the required and optional supplemental reading lists plus other relevant professional sources and academic research.
5. Evaluate the organization's practices in the light of the reviewed sources.
6. Propose steps that the organization could take to improve its practices.
7. Explain the anticipated results that the organization can expect from improving its practices.
8. Provide the reference for each source that you cited.

. The assignment is broken into the following steps, each due before class begins on that day:

1. Submit the topic and organization for approval (October 14).
2. Submit an intended list of sources relating to the topic (October 21).
3. Submit a draft paper (November 18).
4. Submit the final paper (December 9).

Students must schedule a 30-minute meeting with the instructor to get feedback on the draft paper. Scheduling should be done using the SJSU Google calendar. Find a free time on my calendar at least 48 hours ahead, and send an invitation.

5. In-Class Presentation: Students will deliver a summary of the paper (using a PowerPoint presentation) on December 9, in an oral presentation of no more than ten (10) minutes, followed by a question/answer session.

*Reading Reflections/In-Class Participation:* Students will also be assigned chapters in the reading list. Students will write brief reviews of each week's readings, with each review being between 300 and 500 words, 12 point, 1.5 spaced, in the student's own words. Reviews should provide:

1. A summary of the readings.
2. The student's analysis of, and reaction to, the reading.

Points will be deducted for:

- Not having the two sections, with a heading for each section.
- Not using your own words.
- Writing fewer than 300 words.

Each student will also provide an example that illustrates the week's topic, for discussion, in a discussion page that will be set up in Canvas.

## **Grading Information**

The course assignments will be weighted as follows:

<b>Task</b> (P/F = “Pass/Fail” grading)	<b>% of Course Grade</b>
Initial survey (P/F)	2%
Weekly examples for discussion (2% per week, P/F)	16% (up to 18% with extra credit)
Online test	4%
Reading reflections (4% per week, P/F with conditions)	24%
Research paper topic and organization (P/F)	2%
Reading list (P/F)	2%
Draft research paper (P/F with conditions)	10%
Final research paper	30%
Final powerpoint	10%

### Determination of Grades

- All assignments except the test, final research paper, and final powerpoint will be graded pass/fail.
- Students may omit one example for discussion and two reading reflections and still achieve 100% credit. Extra credit will be given for completing more than the minimum number of weekly examples for discussion.
- Late assignments will not be accepted for full credit unless students have a compelling reason, for example illness or family emergency. A grade reduction of 1% of the course grade will be applied to reading reflections and the draft research paper for every day or part-day that the assignment is late. A grade reduction of 3% of the course grade will be applied to the final research paper for every day or part-day that the paper is late. No credit will be given for late surveys, discussion questions, research paper topics, test, or final powerpoints. All assignments may be submitted early.

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

## University Policies

Per [University Policy S16-9](http://www.sjsu.edu/senate/docs/S16-9.pdf) (<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](http://www.sjsu.edu/gup/syllabusinfo) at <http://www.sjsu.edu/gup/syllabusinfo>". Make sure to visit this page, review, and be familiar with these university policies and resources.

## Use of Generative AI

According to the San Jose State University's Academic Integrity Policy (that includes Definitions of Academic Dishonesty), plagiarism is the appropriation of another person's ideas, processes, results or words without giving appropriate credit ([aggiehonors.tamu.edu](http://aggiehonors.tamu.edu)). You should credit your use of anyone else's words, graphic images, or ideas using standard citation styles. Artificial Intelligence (AI) text generators and natural language processing tools (colloquially, chatbots - such as ChatGPT), audio, computer code, video, and image generators should not be used for any work for this class without explicit permission of the instructor and appropriate attribution. This excludes standard software modules within Word such as spelling and grammar checkers, which are acceptable.

## 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.

## Course Schedule

As a portion of each class period will be devoted to discussion of the readings, the reading reflections and discussion questions for the assigned readings must be posted to Canvas by 8AM on class meeting days.

*Note:* This schedule is subject to change with at least one week notice via email. The instructor will confirm at the end of each class the topic and assignments for the next class. Topics may be re-arranged to focus first on the students' greatest interests and facilitate early preparation of the draft paper.

*Guest speakers:* This class may have a guest speaker for the first portion (approximately 60 minutes) of each class who will discuss the topic for that class.

Date	Class Topics, Activities, Readings, & Assignments
Monday, September 30	<p><b>Pre-reading:</b> Chapter 1, PMI. (2017c). <i>A Guide to the Project Management Body of Knowledge (PMBOK® Guide), Sixth Edition</i>. Project Management Institute.</p> <p>Chapter 1, (2017a). <i>The Standard for Project Management</i>. ANSI/PMI 99-001-2017. Published as Part 2 of PMI. (2017c).</p> <p><b>Assignments:</b></p> <ol style="list-style-type: none"><li>1. Respond to a survey on Canvas before 8 am on the day of the class.</li><li>2. Submit an example for discussion before 8 am on the day of the class, on the week's discussion page in Canvas.</li></ol>

Date	Class Topics, Activities, Readings, & Assignments
	<p><b>Topics:</b> Why use standards? What is a project? What is a transportation project? What is the difference between project management, program management, and portfolio management? What are industry sectors?</p> <p><b>Class activities:</b></p> <ul style="list-style-type: none"> <li>• Self introductions: Name. Employment and academic background. Why you are taking this course.</li> <li>• Review syllabus, expectations, assignments, final project and presentations: Weekly assignments (see Canvas). Final project. Presentations.</li> <li>• Review the standards development process and why this class uses standards.</li> <li>• Discuss project management certification.</li> <li>• Consider the standard definitions of a project.</li> <li>• Discuss projects as production systems.</li> <li>• Define a “transportation project.”</li> <li>• Review the distinction between project management, program management, and portfolio management.</li> <li>• Discuss the examples given on the discussion page.</li> <li>• Discuss industry sectors.</li> <li>• Take-aways.</li> </ul>
Monday, October 7	<p><b>Pre-reading:</b> Chapter 13, PMI. (2017c). <i>A Guide to the Project Management Body of Knowledge (PMBOK® Guide), Sixth Edition</i>. Project Management Institute.</p> <p>PMI. (2024). <i>The Standard for Program Management – Fifth Edition</i>. ANSI/PMI 08-002-2024. Project Management Institute.</p> <p>Blampied N, Buttrick R, Jucan G, Piney C, Stevens C, Violette D, and Wideman RM. (2023). In Search of Project Management Principles. <i>Project Management Journal</i>. Dec 1; 54(6).</p> <p><b>Assignments:</b></p> <ul style="list-style-type: none"> <li>• Submit reading reflection.</li> <li>• Submit an example for discussion before 8 am on the day of the class, on the week’s discussion page in Canvas.</li> </ul> <p><b>Topics:</b> Program Management and Stakeholder Management</p> <p><b>Class activities:</b></p> <ul style="list-style-type: none"> <li>• Consider program and project management principles.</li> <li>• Discuss different perspectives on programs: <ul style="list-style-type: none"> <li>a. Standard three-phase lifecycle.</li> <li>b. Five “performance domains”.</li> <li>c. “program activities” and their relationship to project “knowledge areas”.</li> <li>d. Morris, IPMA, and European perspective on “Management of Projects”</li> <li>e. Addition of stakeholder management as a PMBOK® knowledge area in 2012/2013.</li> </ul> </li> </ul>

Date	Class Topics, Activities, Readings, & Assignments
	<ul style="list-style-type: none"> <li>• Blampped research on external activities, building on “Management of Projects”.</li> <li>• Discuss the examples given on the discussion page.</li> <li>• Take-aways.</li> </ul>
Monday, October 14	<p><b>Pre-reading:</b>  <i>The Standard for Portfolio Management – Fourth Edition</i>. ANSI/PMI 08-003-2017. Project Management Institute.</p> <p><b>Assignments:</b></p> <ul style="list-style-type: none"> <li>• Submit reading reflection.</li> <li>• Submit an example for discussion before 8 am on the day of the class, on the week’s discussion page in Canvas.</li> <li>• Submit your research paper topic and organization for approval.</li> </ul> <p><b>Topics:</b>  Portfolio management.  Organizational project management.</p> <p><b>Class activities:</b>  Discuss Portfolio Performance Domains:</p> <ul style="list-style-type: none"> <li>• Strategic Alignment and Governance</li> <li>• Capacity Management <ul style="list-style-type: none"> <li>a. Resource inelasticity</li> <li>b. Resource levelling</li> <li>c. Obstacle removal</li> </ul> </li> <li>• Capability management: Recruiting (capability assessment &amp; building new capabilities); Training (building new capabilities and sustaining existing capabilities); Plant and equipment acquisition</li> <li>• Stakeholder engagement</li> <li>• Value management</li> <li>• Risk management</li> <li>• Portfolio lifecycle: Execution and optimization <ul style="list-style-type: none"> <li>a. Little’s Law</li> <li>b. Theory of Constraints</li> <li>c. Variability <ul style="list-style-type: none"> <li>i. Single-piece flow</li> <li>ii. Single-second exchange of die</li> <li>iii. California Incident command system</li> <li>iv. Maneuver warfare</li> <li>v. Buffers</li> </ul> </li> <li>d. Lean Production</li> <li>e. Central role of schedule management</li> </ul> </li> <li>• Roles and responsibilities of: <ul style="list-style-type: none"> <li>a. Executives and managers</li> <li>b. Project managers and work package mangers</li> </ul> </li> </ul> <p>Discuss the examples given on the discussion page.  Take-aways.</p>

Date	Class Topics, Activities, Readings, & Assignments
Monday, October 21	<p><b>Pre-reading:</b>  Chapters 2 and 5, PMI. (2017c). <i>A Guide to the Project Management Body of Knowledge (PMBOK® Guide), Sixth Edition</i>. Project Management Institute.  PMI. (2019a). <i>Practice Standard for Work Breakdown Structures – Second Edition</i>. Project Management Institute.</p> <p><b>Assignments:</b></p> <ul style="list-style-type: none"> <li>• Submit a list of at least 10 sources relating to your chosen final paper topic, that you intend to read for the final paper.</li> <li>• Submit reading reflection.</li> <li>• Submit an example for discussion before 8 am on the day of the class, on the week’s discussion page in Canvas.</li> </ul> <p><b>Topics:</b>  Project lifecycle and scope management.</p> <p><b>Class activities:</b></p> <ul style="list-style-type: none"> <li>• Discuss project charter.</li> <li>• Discuss project vs. product scope.</li> <li>• Discuss project lifecycle.</li> <li>• Discuss the five standard project management process groups.</li> <li>• Discuss Work Breakdown Structures.</li> <li>• Discuss Work packages.</li> <li>• Discuss Activities vs WBS.</li> <li>• Discuss the concept of Control Account Manager, Functional Manager, or Resource Manager.</li> <li>• Discuss progressive elaboration / rolling wave planning.</li> <li>• Discuss reliable promises.</li> <li>• Discuss project management concepts.</li> <li>• Discuss the examples given on the discussion page..</li> <li>• Take-aways.</li> </ul>
Monday, October 28	<p><b>Pre-reading:</b>  Chapter 7, PMI. (2017c). <i>A Guide to the Project Management Body of Knowledge (PMBOK® Guide), Sixth Edition</i>. Project Management Institute.  PMI. (2011a). <i>Practice Standard for Project Estimating</i>. Project Management Institute.</p> <p><b>Assignments:</b></p> <ul style="list-style-type: none"> <li>• Complete online test.</li> <li>• Submit reading reflection.</li> <li>• Submit an example for discussion before 8 am on the day of the class, on the week’s discussion page in Canvas.</li> </ul> <p><b>Topics:</b>  Cost management and estimating.</p> <p><b>Class activities:</b>  Discuss methods of estimating:</p>

Date	Class Topics, Activities, Readings, & Assignments
	<ul style="list-style-type: none"> <li>• Analogous.</li> <li>• Parametric.</li> <li>• Bottom-up.</li> </ul> <p>Discuss three point estimating.  Discuss budget determination.  Discuss cost control.  Discuss the examples given on the discussion page.  Take-aways.</p>
Monday, November 4	<p><b>Pre-reading:</b>  Chapter 6, PMI. (2017c). <i>A Guide to the Project Management Body of Knowledge (PMBOK® Guide), Sixth Edition</i>. Project Management Institute.  PMI. (2011b). <i>Practice Standard for Scheduling – Second Edition</i>. Project Management Institute.</p> <p><b>Assignments:</b></p> <ul style="list-style-type: none"> <li>• Submit reading reflection.</li> <li>• Submit an example for discussion before 8 am on the day of the class, on the week’s discussion page in Canvas.</li> </ul> <p><b>Topics:</b>  Project schedule management.</p> <p><b>Class activities:</b></p> <ul style="list-style-type: none"> <li>• Discuss activity sequencing and network diagrams.</li> <li>• Discuss schedule development methods include: <ul style="list-style-type: none"> <li>○ Critical path method.</li> <li>○ Resource optimization. <ul style="list-style-type: none"> <li>▪ Leveling.</li> <li>▪ Smoothing.</li> <li>▪ Compression.</li> <li>▪ Time-cost trade-off.</li> </ul> </li> <li>○ Vertical production / linear / location based / line of balance scheduling</li> <li>○ Agile</li> <li>○ Lean scheduling / Last Planner®</li> </ul> </li> <li>• Discuss the critical importance of schedule control</li> <li>• Discuss the examples given on the discussion page..</li> <li>• Take-aways.</li> </ul>
Monday, November 11	<p><b>Holiday.</b>  No class meeting.</p>
Monday, November 18	<p><b>Pre-reading:</b>  Chapters 9 and 12, PMI. (2017c). <i>A Guide to the Project Management Body of Knowledge (PMBOK® Guide), Sixth Edition</i>. Project Management Institute.</p> <p><b>Assignments:</b></p> <ul style="list-style-type: none"> <li>• Submit reading reflection.</li> </ul>

Date	Class Topics, Activities, Readings, & Assignments
	<ul style="list-style-type: none"> <li>• Submit an example for discussion before 8 am on the day of the class, on the week’s discussion page in Canvas.</li> <li>• Submit draft research paper.</li> </ul> <p><b>Topics:</b> Human resources. Project organization. Reliable promises. Procurement. Contracting methods. Artificial intelligence and projects.</p> <p><b>Class activities:</b></p> <ul style="list-style-type: none"> <li>• Discuss the theory of make-or-buy based on transaction cost economics and the work of Ronald Coase, Herbert Simon, Douglass North, and Oliver Williamson.</li> <li>• Discuss how organizations, and particularly public organizations, get their in-house human resources to make products, based on the writing of Chester Barnard.</li> <li>• Discuss production in civil service, based on the writings of James Q. Wilson, Philip Selznick, and Woodrow Wilson.</li> <li>• Discuss principal-agent theory and its application in civil service (Terry Moe).</li> <li>• Discuss organizational change (Douglass North and John Kotter)</li> <li>• Discuss Williamson’s “efficient governance” model for choosing the best make-or-buy and contracting approach.</li> <li>• Discuss the application of Williamson’s model using Caltrans and Highways England as case studies.</li> <li>• Suggest Elinor Ostrom’s work on the commons as possible alternative to Williamson when considering government contracting.</li> <li>• Discuss the examples given on the discussion page.</li> <li>• Take-aways.</li> </ul>
Monday, November 25	<p><b>Pre-reading:</b> Chapters 8 and 10, PMI. (2017c). <i>A Guide to the Project Management Body of Knowledge (PMBOK® Guide), Sixth Edition</i>. Project Management Institute.</p> <p><b>Assignments:</b></p> <ul style="list-style-type: none"> <li>• Submit reading reflection.</li> <li>• Submit an example for discussion before 8 am on the day of the class, on the week’s discussion page in Canvas.</li> </ul> <p><b>Topics:</b> Quality. Built-in quality. ISO 9000. Communications.</p> <p><b>Class activities:</b></p> <ul style="list-style-type: none"> <li>• QUALITY <ul style="list-style-type: none"> <li>a. Discuss the two types of quality: <ul style="list-style-type: none"> <li>i. “Quality of Design”, also referred to as “Built-in quality” which is quality of the work which, in our case, refers to the project or program / work quality,</li> <li>ii. “Quality of Conformance” also referred to as “Quality by Inspection” which is quality of the product or output of the work.</li> </ul> </li> <li>b. Distinguish between grade and quality.</li> </ul> </li> </ul>

Date	Class Topics, Activities, Readings, & Assignments
	<ul style="list-style-type: none"> <li>c. Note that there is an expectation that Quality of Design (“Built-in Quality”) will remove or decrease the need for in Quality of Conformance (“Inspect-in Quality”).</li> <li>d. Discuss and give examples of the three types of efficiency: Economy, Effectiveness, Productivity.</li> <li>e. Offer Choosing by Advantages as a preferred tool for alternatives analysis / decision making.</li> <li>• COMMUNICATION <ul style="list-style-type: none"> <li>a. Note that communication is discussed in depth in MSTM course 214, a required course for the degree.</li> <li>b. Discuss the fact that government communications may be confidential in the short term, but all except personnel matters will become public records.</li> </ul> </li> <li>• Discuss the examples given on the discussion page.</li> <li>• Take-aways.</li> </ul>
Monday, December 2	<p><b>Pre-reading:</b> Chapters 4 and 11, PMI. (2017c). <i>A Guide to the Project Management Body of Knowledge (PMBOK® Guide), Sixth Edition</i>. Project Management Institute.</p> <p><b>Assignments:</b></p> <ol style="list-style-type: none"> <li>1. Submit reading reflection.</li> <li>2. Submit an example for discussion before 8 am on the day of the class, on the week’s discussion page in Canvas.</li> </ol> <p><b>Topics:</b> Risk. Integration.</p> <p><b>Class activities:</b> Discuss Risk management in projects, programs, and portfolios:</p> <ol style="list-style-type: none"> <li>3. Risks can be at the project, program, portfolio or enterprise level; distinctions between them.</li> <li>4. The challenge of unknowns.</li> <li>5. Distinction between issues and risks.</li> <li>6. Risks can be positive (opportunities)</li> <li>7. Qualitative and quantitative (statistical) risk analysis.</li> <li>8. Possible responses: Accept, mitigate, avoid, and transfer.</li> <li>9. Risk registers and risk control.</li> </ol> <p>Discuss project integration:</p> <ol style="list-style-type: none"> <li>10. Role on every project.</li> <li>11. Value of baselining.</li> </ol> <p>Discuss the examples given on the discussion page. Take-aways.</p>
Monday, December 9	<p><b>Pre-reading:</b> None.</p> <p><b>Assignments:</b></p> <ol style="list-style-type: none"> <li>1. Submit final research paper.</li> <li>2. Submit final powerpoint.</li> </ol> <p><b>Class activities:</b></p>

<b>Date</b>	<b>Class Topics, Activities, Readings, &amp; Assignments</b>
	Presentations.