

San José State University
Lucas Graduate School of Business
Master of Science in Transportation Management
MTM 260: Project Management for Transportation
Fall-B 2020

Course and Instructor Contact Information

Instructor:	Nigel Blampied
Office Location:	Contact instructor
Telephone:	(510) 479-7070
Email:	nigel.blampied@sjsu.edu
Office Hours:	By appointment. Please find a free time on my SJSU Google calendar at least 48 hours ahead, and send an invitation.
Class Day/Time:	Thursdays, 5:30 - 9:30 pm (Pacific), October 8 - December 17, 2020, excluding November 26.
Classroom:	All classes held on Zoom
Grading rules:	Normal grade rules apply
Units:	3
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 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" 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: [.....]

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 the five standard project management process groups and the ten standard project management knowledge areas and how they are used in projects.
3. Perform basic project scheduling and estimating.
4. Describe the five standard program management performance domains and how they are used in project programs.
5. Describe the six standard portfolio management performance domains and how they are used in project portfolios.
6. Translate the project development terms used in transportation agencies into standard project management terms, and vice versa.
7. Identify how transportation projects are similar to and different from projects defined in the American National and International Standards.
8. 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.
9. Evaluate the application of selected knowledge areas and performance domains in a transportation organization.

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 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

ANSI/PMI 08-002-2017. *The Standard for Program Management – Fourth Edition*. Project Management Institute, Newtown Square, PA. ISBN: 978-1-62825-196-8

ANSI/PMI 08-003-2017. *The Standard for Portfolio Management – Fourth Edition*. Project Management Institute, Newtown Square, PA. ISBN: 978-1-62825-197-5

- ANSI/PMI 99-001-2017. *The Standard for Project Management*. Published as Part 2 of PMI 2017a below. Project Management Institute, Newtown Square, PA. ISBN: 978-1-62825-184-5
- PMI (2011a). *Practice Standard for Project Estimating*. Project Management Institute, Newtown Square, PA. ISBN: 978-1-935589-12-9
- PMI (2011b). *Practice Standard for Scheduling – Second Edition*. Project Management Institute, Newtown Square, PA. ISBN: 978-1-935589-24-2
- PMI (2017a). *A Guide to the Project Management Body of Knowledge (PMBOK® Guide), Sixth Edition*. Project Management Institute, Newtown Square, PA. ISBN: 978-1-62825-184-5
- PMI (2019a). *Practice Standard for Work Breakdown Structures – Third Edition*. Project Management Institute, Newtown Square, PA. ISBN: ISBN: 978-1-62825-619-2
- PMI (2019b). *The Standard for Risk Management in Portfolios, Programs, and Projects*. Project Management Institute, Newtown Square, PA. ISBN: 978-1-62825-565-2

Student-selected reading

Academic papers selected by students for their term projects though systematic searches of databases such as Scopus and Proquest Dissertations and Theses.

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, Washington, DC. 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, Washington, DC. Available at <http://www.trb.org/Main/Blurbs/162271.aspx>
- ANSI/PMI 08-004-2013. *Organizational Project Management Maturity Model – Third Edition*. Project Management Institute, Newtown Square, PA. ISBN: 978-1-935589-70-9
- ISO 21500:2012 *Guidance on project management*, International Organization for Standardization, Geneva. ISBN 978-9-267107-59-2
- ISO 21503:2017 *Project, programme and portfolio management -- Guidance on programme management*, International Organization for Standardization, Geneva.
- ISO 21504:2015 *Project, programme and portfolio management -- Guidance on portfolio management*. International Organization for Standardization, Geneva.
- ISO 21505:2017 *Project, programme and portfolio management -- Guidance on governance*. International Organization for Standardization, Geneva.
- ISO 21508:2018 *Earned value management in project and programme management*. International Organization for Standardization, Geneva.
- ISO 21511:2018 *Work breakdown structures for project and programme management*. International Organization for Standardization, Geneva.

- ISO/TR 21506:2018 *Project, programme and portfolio management – Vocabulary*. International Organization for Standardization, Geneva.
- Marshall, K. R., and Rousey, S. (2009). *Guidance for Transportation Project Management*. Transportation Research Board, Washington, DC. <https://doi.org/10.17226/23028>.
- PMI (2006). *Government Extension to the PMBOK® Guide – Third Edition*. Project Management Institute, Newtown Square, PA. ISBN: 978-1-930699-91-5
- PMI (2013a). *Managing Change in Organizations: A Practice Guide*. Project Management Institute, Newtown Square, PA. ISBN: 978-1-62825-015-2
- PMI (2013b). *Software Extension to the PMBOK® Guide – Fifth Edition*. Project Management Institute, Newtown Square, PA. ISBN: 978-1-62825-013-8
- PMI (2014a). *Implementing Organizational Project Management: A Practice Guide*. Project Management Institute, Newtown Square, PA. ISBN: 978-1-62825-035-0
- PMI (2014b). *Navigating Complexity: A Practice Guide*. Project Management Institute, Newtown Square, PA. ISBN: 978-1-62825-036-7
- PMI (2015). *Business Analysis for Practitioners: A Practice Guide*. Project Management Institute, Newtown Square, PA. ISBN: 978-1-62825-069-5
- PMI (2016a). *Construction Extension to the PMBOK® Guide*. Project Management Institute, Newtown Square, PA. ISBN: 978-1-62825-090-9
- PMI (2016b). *Governance of Portfolios, Programs, and Projects: A Practice Guide*. Project Management Institute, Newtown Square, PA. ISBN: 978-1-62825-088-6
- PMI (2016c). *Requirements Management: A Practice Guide*. Project Management Institute, Newtown Square, PA. ISBN: 978-1-62825-089-3
- PMI (2017b). *Agile Practice Guide*. Published with PMI 2017a above. Project Management Institute, Newtown Square, PA. ISBN: 978-1-62825-199-9
- PMI (2017c). *PMI Guide to Business Analysis*. Project Management Institute, Newtown Square, PA. ISBN: 978-1-62825-198-2
- PMI (2017d). *Project Manager Competency Development Framework – Third Edition* Project Management Institute, Newtown Square, PA. ISBN: 978-1-62825-091-6
- PMI (2018). *The Standard for Organizational Project Management*. Project Management Institute, Newtown Square, PA. ISBN: 978-1-62825-200-2
- PMI (2019c). *The Standard for Earned Value Management*. Project Management Institute, Newtown Square, PA. ISBN: 978-1-62825-638-3
- 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, Washington, DC. 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, Washington, DC. 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. Sacramento, CA.

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, Fort Belvoir, VA. 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 Society of Civil Engineers 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://ascelibrary.org/doi/pdf/10.1061/9780784479018>.

Library Liaison

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 (normally three hours per unit per week) 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 above, plus at least five academic papers.
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 for approval, together with an intended list of sources and a description of the method used to select the sources (October 22).
2. Submit a draft paper (November 19).

3. Submit the final paper (December 17).

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.

4. In-Class Presentation: Students will deliver a summary of the paper (using a PowerPoint presentation) on December 17, 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 two questions for discussion, to be entered separately in a discussion page that will be set up in Canvas.

Grading Information

The course assignments will be weighted as follows:

Task (P/F = "Pass/Fail" grading)	% of Course Grade	Learning Outcomes Addressed
Initial survey (P/F)	2%	1, 2
Discussion questions (2% per week, P/F)	16% (up to 18% with extra credit)	1 - 7
Reading reflections (5% per week, P/F with conditions)	30%	1 - 7
Research paper topic (P/F)	2%	7 - 9
Draft research paper (P/F with conditions)	10%	7 - 9
Final research paper	30%	7 - 9
Final powerpoint	10%	7 - 9

Determination of Grades

- All assignments except the final research paper and final powerpoint will be graded pass/fail.
- Students may omit one set of weekly questions and two weekly reading reflections and still achieve 100% credit. Extra credit will be given for completing more than the minimum number of weekly discussion questions.

- 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, or final powerpoints. All assignments may be submitted early.

Percentage	Grade
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-
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](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.

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
Thursday, October 8	<p>Pre-reading: Chapter 1, PMI (2017a). <i>A Guide to the Project Management Body of Knowledge (PMBOK® Guide), Sixth Edition</i>. Project Management Institute, Newtown Square, PA. ISBN: 978-1-62825-184-5</p> <p>Chapter 1, ANSI/PMI 99-001-2017. <i>The Standard for Project Management</i>. Published as Part 2 of PMI (2017a).</p> <p>Assignments:</p> <ol style="list-style-type: none"> 1. Respond to a survey on Canvas before 8 am on the day of the class. 2. Submit two discussion questions before 8 am on the day of the class, on the week's discussion page in Canvas. 3. "Like" the questions that you would most like to discuss. The discussion page is set to sort by the number of likes. 4. Answer at least one of your classmates' questions that has not been answered by anyone else. 5. of your classmates' questions that has not been answered by anyone else. <p>Topics: 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>Class activities:</p> <ul style="list-style-type: none"> • Self introductions: Name. Employment and academic background. Why you are taking this course. • Review syllabus, expectations, assignments, final project and presentations: Weekly assignments (see Canvas). Final project. Presentations. • Review the standards development process and why this class uses standards. • Discuss project management certification. • Consider the standard definitions of a project. • Discuss projects as production systems. • Define a "transportation project." • Review the distinction between project management, program management, and portfolio management.

	<ul style="list-style-type: none"> • Discuss questions on the readings. • Discuss industry sectors. • Take-aways.
<p>Thursday, October 15</p>	<p>Pre-reading: Chapters 2 and 5, PMI (2017a). <i>A Guide to the Project Management Body of Knowledge (PMBOK® Guide), Sixth Edition</i>. Project Management Institute, Newtown Square, PA. ISBN: 978-1-62825-184-5</p> <p>PMI (2006). <i>Practice Standard for Work Breakdown Structures – Second Edition</i>. Project Management Institute, Newtown Square, PA. ISBN: 978-1-933890-13-5</p> <p>Assignments:</p> <ul style="list-style-type: none"> • Submit reading reflection. • Submit two discussion questions before 8 am on the day of the class, on the week’s discussion page in Canvas. • “Like” the questions that you would most like to discuss. The discussion page is set to sort by the number of likes. • Answer at least one of your classmates’ questions that has not been answered by anyone else. <p>Topics: Project lifecycle and scope management.</p> <p>Class activities:</p> <ul style="list-style-type: none"> • 6:00 pm guest speaker: Jim Davis, Chief Deputy Statewide Director of Caltrans, and former Division Chief for Project Management. • Discuss project charter. • Discuss project vs. product scope. • Discuss project lifecycle. • Discuss the five standard project management process groups. • Discuss Work Breakdown Structures. • Discuss Work packages. • Discuss Activities vs WBS. • Discuss the concept of Control Account Manager, Functional Manager, or Resource Manager. • Discuss progressive elaboration / rolling wave planning. • Discuss reliable promises. • Discuss project management concepts. • Discuss questions on the readings. • Take-aways.
<p>Thursday, October 22</p>	<p>Pre-reading: Chapter 13, PMI (2017a). <i>A Guide to the Project Management Body of Knowledge (PMBOK® Guide), Sixth Edition</i>. Project Management Institute, Newtown Square, PA. ISBN: 978-1-62825-184-5</p> <p>ANSI/PMI 08-002-2013. <i>The Standard for Program Management – Third Edition</i>. Project Management Institute, Newtown Square, PA. ISBN: 978-1-935589-68-6</p>

	<p>Assignments:</p> <ul style="list-style-type: none"> • Submit reading reflection. • Submit two discussion questions before 8 am on the day of the class, on the week’s discussion page in Canvas. • “Like” the questions that you would most like to discuss. The discussion page is set to sort by the number of likes. • Answer at least one of your classmates’ questions that has not been answered by anyone else. <p>Topics: Program Management and Stakeholder Management</p> <p>Class activities:</p> <ul style="list-style-type: none"> • 7:30 pm guest speaker: Janneke Strause, City of San Jose Bicycle and Pedestrian Program. • Discuss different perspectives on programs: <ul style="list-style-type: none"> a. Standard three-phase lifecycle. b. Five “performance domains”. c. “program activities” and their relationship to project “knowledge areas”. d. Morris, IPMA, and European perspective on “Management of Projects” e. Addition of stakeholder management as a PMBOK® knowledge area in 2012/2013. • Blampied research on external activities, building on “Management of Projects”. • Mullaly’s “Program Management for Dummies”. • Discussion questions. • Take-aways.
<p>Thursday, October 29</p>	<p>Pre-reading: ANSI/PMI 08-003-2013. <i>The Standard for Portfolio Management – Third Edition</i>. Project Management Institute, Newtown Square, PA. ISBN: 978-1-935589-69-3</p> <p>Assignments:</p> <ul style="list-style-type: none"> • Submit reading reflection. • Submit two discussion questions before 8 am on the day of the class, on the week’s discussion page in Canvas. • “Like” the questions that you would most like to discuss. The discussion page is set to sort by the number of likes. • Answer at least one of your classmates’ questions that has not been answered by anyone else. <p>Topics: Portfolio management. Organizational project management.</p> <p>Class activities:</p> <ul style="list-style-type: none"> • 6:00 pm guest speaker: Robin Blair, Senior Director- Executive Office of Operations - Liaison Group, Los Angeles County Metropolitan Transportation Authority (Metro). <p>Discuss Portfolio Performance Domains:</p> <ul style="list-style-type: none"> • Strategic Alignment and Governance

	<ul style="list-style-type: none"> • Capacity Management <ul style="list-style-type: none"> a. Resource inelasticity b. Resource levelling c. Obstacle removal • Capability management: Recruiting (capability assessment & building new capabilities); Training (building new capabilities and sustaining existing capabilities); Plant and equipment acquisition • Stakeholder engagement • Value management • Risk management • Portfolio lifecycle: Execution and optimization <ul style="list-style-type: none"> a. Little’s Law b. Theory of Constraints c. Variability <ul style="list-style-type: none"> i. Single-piece flow ii. Single-second exchange of die iii. California Incident command system iv. Maneuver warfare v. Buffers d. Lean Production e. Central role of schedule management • Roles and responsibilities of: <ul style="list-style-type: none"> a. Executives and managers b. Project managers and work package mangers <p>Discuss questions on the readings. Take-aways.</p>
<p>Thursday, November 5</p>	<p>Pre-reading: Chapter 7, PMI (2017a). <i>A Guide to the Project Management Body of Knowledge (PMBOK® Guide), Sixth Edition</i>. Project Management Institute, Newtown Square, PA. ISBN: 978-1-62825-184-5</p> <p>PMI (2011a). <i>Practice Standard for Project Estimating</i>. Project Management Institute, Newtown Square, PA. ISBN: 978-1-935589-12-9</p> <p>Assignments:</p> <ul style="list-style-type: none"> • Submit reading reflection. • Submit two discussion questions before 8 am on the day of the class, on the week’s discussion page in Canvas. • “Like” the questions that you would most like to discuss. The discussion page is set to sort by the number of likes. • Answer at least one of your classmates’ questions that has not been answered by anyone else. • Submit your research paper topic for approval, together with an intended list of sources and the method used to select the sources. <p>Topics: Cost and estimating.</p>

	<p>Class activities: Discuss methods of estimating:</p> <ul style="list-style-type: none"> • Analogous. • Parametric. • Bottom-up. <p>Discuss three point estimating. Discuss budget determination. Discuss cost control. Discuss questions on the readings. Take-aways.</p>
<p>Thursday, November 12</p>	<p>Pre-reading: Chapter 6, PMI (2017a). <i>A Guide to the Project Management Body of Knowledge (PMBOK® Guide), Sixth Edition</i>. Project Management Institute, Newtown Square, PA. ISBN: 978-1-62825-184-5</p> <p>PMI (2011b). <i>Practice Standard for Scheduling – Second Edition</i>. Project Management Institute, Newtown Square, PA. ISBN: 978-1-935589-24-2</p> <p>Assignments:</p> <ul style="list-style-type: none"> • Submit reading reflection. • Submit two discussion questions before 8 am on the day of the class, on the week’s discussion page in Canvas. • “Like” the questions that you would most like to discuss. The discussion page is set to sort by the number of likes. • Answer at least one of your classmates’ questions that has not been answered by anyone else. <p>Topics: Project schedule management.</p> <p>Class activities:</p> <ul style="list-style-type: none"> • Discuss activity sequencing and network diagrams. • Discuss schedule development methods include: <ul style="list-style-type: none"> ○ Critical path method. ○ Resource optimization. <ul style="list-style-type: none"> ▪ Leveling. ▪ Smoothing. ▪ Compression. ▪ Time-cost trade-off. ○ Vertical production / linear / location based / line of balance scheduling ○ Agile ○ Lean scheduling / Last Planner® • Discuss the critical importance of schedule control • Discuss questions on the readings. • Take-aways.
<p>Thursday, November 19</p>	<p>Pre-reading: Chapters 9 and 12, PMI (2017a). <i>A Guide to the Project Management Body of Knowledge (PMBOK® Guide), Sixth Edition</i>. Project Management Institute, Newtown Square, PA.</p>

	<p>ISBN: 978-1-62825-184-5</p> <p>Assignments:</p> <ul style="list-style-type: none"> • Submit reading reflection. • Submit two discussion questions before 8 am on the day of the class, on the week’s discussion page in Canvas. • “Like” the questions that you would most like to discuss. The discussion page is set to sort by the number of likes. • Answer at least one of your classmates’ questions that has not been answered by anyone else. <p>Topics: Human resources. Project organization. Reliable promises. Procurement. Contracting methods. Artificial intelligence and projects.</p> <p>Class activities:</p> <ul style="list-style-type: none"> • 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. • Discuss how organizations, and particularly public organizations, get their in-house human resources to make products, based on the writing of Chester Barnard. • Discuss production in civil service, based on the writings of James Q. Wilson, Philip Selznick, and Woodrow Wilson. • Discuss principal-agent theory and its application in civil service (Terry Moe). • Discuss organizational change (Douglass North and John Kotter) • Discuss Williamson’s “efficient governance” model for choosing the best make-or-buy and contracting approach. • Discuss the application of Williamson’s model using Caltrans and Highways England as case studies. • Suggest Elinor Ostrom’s work on the commons as possible alternative to Williamson when considering government contracting. • Discuss questions on the readings. • Take-aways.
<p>Thursday, December 3</p>	<p>Pre-reading: Chapters 8 and 10, PMI (2017a). <i>A Guide to the Project Management Body of Knowledge (PMBOK® Guide), Sixth Edition</i>. Project Management Institute, Newtown Square, PA. ISBN: 978-1-62825-184-5</p> <p>Assignments:</p> <ul style="list-style-type: none"> • Submit reading reflection. • Submit two discussion questions before 8 am on the day of the class, on the week’s discussion page in Canvas. • “Like” the questions that you would most like to discuss. The discussion page is set to sort by the number of likes. • Answer at least one of your classmates’ questions that has not been answered by anyone else. <p>Topics: Quality. Built-in quality. ISO 9000. Communications.</p>

	<p>Class activities:</p> <ul style="list-style-type: none"> • 6:00 pm guest speaker: Laurie Berman, retired Caltrans Statewide Director and former Project Manager in Caltrans District 11, San Diego. • QUALITY <ul style="list-style-type: none"> a. Discuss the two types of quality: <ul style="list-style-type: none"> 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, ii. “Quality of Conformance” also referred to as “Quality by Inspection” which is quality of the product or output of the work. b. Distinguish between grade and quality. 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”). d. Discuss and give examples of the three types of efficiency: Economy, Effectiveness, Productivity. e. Offer Choosing by Advantages as a preferred tool for alternatives analysis / decision making. • COMMUNICATION <ul style="list-style-type: none"> a. Note that communication is discussed in depth in MSTM course 214, a required course for the degree. b. Discuss the fact that government communications may be confidential in the short term, but all except personnel matters will become public records. • Discuss questions on the readings. • Take-aways.
<p>Thursday, December 10</p>	<p>Pre-reading: Chapters 4 and 11, PMI (2017a). <i>A Guide to the Project Management Body of Knowledge (PMBOK® Guide), Sixth Edition</i>. Project Management Institute, Newtown Square, PA. ISBN: 978-1-62825-184-5</p> <p>Assignments:</p> <ol style="list-style-type: none"> 1. Submit reading reflection. 2. Submit two discussion questions before 8 am on the day of the class, on the week’s discussion page Canvas. 3. “Like” the questions that you would most like to discuss. The discussion page is set to sort by the number of likes. 4. Answer at least one of your classmates’ questions that has not been answered by anyone else. 5. Submit draft research paper. <p>Topics: Risk. Integration.</p> <p>Class activities: Discuss Risk management in projects, programs, and portfolios:</p> <ol style="list-style-type: none"> 1. 6:00 pm guest speaker: Michael Hass, Quality Assurance Manager for the East Bay Bus Rapid Transit Project, AC Transit. 2. Risks can be at the project, program, portfolio or enterprise level; distinctions

	<p>between them.</p> <ol style="list-style-type: none"> 3. The challenge of unknowns. 4. Distinction between issues and risks. 5. Risks can be positive (opportunities) 6. Qualitative and quantitative (statistical) risk analysis. 7. Possible responses: Accept, mitigate, avoid, and transfer. 8. Risk registers and risk control. <p>Discuss project integration:</p> <ol style="list-style-type: none"> 9. Role on every project. 10. Value of baselining. <p>Discuss questions on the readings. Take-aways.</p>
<p>Thursday, December 17</p>	<p>Pre-reading: None.</p> <p>Assignments:</p> <ol style="list-style-type: none"> 1. Submit final research paper. 2. Submit final powerpoint. <p>Class activities: Presentations.</p>