Managing projects is a critical activity for many companies. This trend of project-based work is getting stronger as businesses continue to innovate outside of steady-state operations, rely on contractor and consultant models, collaborate across traditional functional lines, and move into decentralized and hybrid virtual working environments. This course introduces important behavioral skills and analytical tools for managing complex projects across functions and partners. The behavioral skills will focus on organizing, planning, and leading diverse teams through uncertainties and risks. The analytical methods will be applied to uncover project risks and constraints, evaluate options and trade-offs, and help make the best decision in an uncertain and complex project environment.

This course begins with organizational issues in project management and focuses on skills and roles of project leaders, and structure of project and governance teams. Then the course moves on to management and analytical areas that cover project planning, scope management, schedule and critical path management, project resource, cost, controls, and risk management. Finally, the course will include areas related to product management, application of Agile methodology, and the future of PM.

We will discuss cases describing successful projects and failures throughout the semester and learn project success factors. Our lectures will include guest speakers from leading companies, advanced simulation “games”, case analysis and presentations, and the tutorials and applications of core analytical tools such as Excel, simulation software called @Risk for risk management, and Microsoft Project for scheduling and resource management.

**Learning Outcomes**

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

- Describe the required behavioral and analytical skills to successfully manage complex cross-functional projects
- Explain roles and capabilities for project managers, teams, and governance bodies
- Describe the phases of the project lifecycle, from initial proposal through closure and transition
into the organization

- Apply analytical tools (Excel, MS Project, @Risk)) to support managing projects and their uncertainties
- Explain methods and tools of Project Management, from project initiation through transition into ongoing business
- Describe the benefits of various project management approaches to apply Waterfall, Agile, Critical Chain methods
- Learn to apply the current and future best practices in your organizations!

The purpose of this class is to advance the above learning objectives. This will require a diverse learning environment, inclusive communication, and meaningful exchanges and feedback. The course is divided into sessions which correspond with weeks. Students are required to complete the reading assignments, pre-recorded lectures, interactive exercises, and homework assignments at their own pace during the week before attending the live video conference session, where they will interact with one another and with faculty to apply the concepts they’ve learned throughout the week.

**Learning Management System - Brightspace**

USC is making a change in Learning Management System (LMS). DSO580 course will be taught using the new Brightspace LMS, rather than Blackboard.

**How to Log In**

To access Brightspace today, follow these steps:
1. Go to [https://brightspace.usc.edu/d2l/login](https://brightspace.usc.edu/d2l/login)
2. Enter your USC Net ID to access your Org Homepage
3. Begin navigating through Brightspace

**What to Expect**

Brightspace offers an intuitive experience featuring familiar tools like Turnitin and Zoom, alongside new features such as interactive widgets and mobile compatibility. It also provides detailed student reports and progress tracking to enrich your learning experience. Upon accessing Brightspace, you can expect to see:

- **The DSO 580 Course**: We will utilize course modules in this throughout the semester.
- **A Practice Course**: Use the Learn How to Use Brightspace at USC – For Students course to practice navigating the platform, submitting an assignment and more.

I also encourage you to download the mobile app, Brightspace Pulse, available in both the Apple App Store and Google Play.

**Support Resources**

To learn more about Brightspace, check out training and resources in the Brightspace Student Tutorials. For technical support, please reach out to brightspace@usc.edu or call 213-740-5555 (option 2>2).
Course Materials

Optional Text Books

  – It is fine if you have an earlier version of this textbook
  – The reading references in the detailed schedule are from this optional textbook

Additional References


Online Course Reader

Containing cases which can be purchased from Harvard Business Online. To purchase the case, you need to go to Online Course Reader (a link will be provided) and register/sign in. The website will allow you to purchase the cases using your credit card. There are several cases in this online reader (an additional one or two cases might be added), other cases will be provided in Brightspace.

Project Simulation Game

Please go to Project Simulation Game which is also included in the Online Course Reader at (a link will be provided) and sign in to purchase the license. After the purchase, you will have access to the simulation game, which we will play throughout the semester.

Brightspace Files

Additional articles and notes will be posted on Brightspace

Software

• Microsoft Project – I will provide you with installation instructions during the second / third week
• @Risk – I will provide you with installation instructions during the first week
• Project Management Simulation: Scope, Resources, Schedule. Available from the online course reader (wait until we meet in class for further instructions)
• Other MS Office applications, particularly Excel and PowerPoint
• Note: MS Project and @Risk will be available through Virtual Lab, which requires that the work is saved on OneDrive (or flash drive or local computer) as Virtual Lab does not allow the files to be saved directly there when the student logs out

Grading

Your grade in this course will be based on individual class participation, group assignments, individual assignments, and tests. I will assess your understanding of the tools and concepts covered, your ability to integrate and apply those concepts and your contribution to the learning experience of the class as follows:
### Activity/Assessment

<table>
<thead>
<tr>
<th>Activity/Assessment</th>
<th>% of Course Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class participation and discussion</td>
<td>8%</td>
</tr>
<tr>
<td>Group Case prep and presentation</td>
<td>10%</td>
</tr>
<tr>
<td>Homework assignments and case studies</td>
<td>17%</td>
</tr>
<tr>
<td>Mid-term exam</td>
<td>25%</td>
</tr>
<tr>
<td>Final exam</td>
<td>35%</td>
</tr>
<tr>
<td>Simulation debriefing reports</td>
<td>5%</td>
</tr>
</tbody>
</table>

### Class Participation

Class participation requires that you do the assigned readings, analyze the cases based on the questions given and participate actively in live sessions. I look for substantive comments based on good analysis rather than brief, general comments that add little to the discussion. If you are reluctant to talk in class but would like to show your preparation, please provide me with your analysis via the online discussion boards before or during live sessions. Be prepared to defend your suggestions or solutions with careful and thoughtful analysis! Useful criteria for measuring effective class participation include:

- Is the student absent too many times? Does the student arrive late to class?
- Are the points that are made relevant to the discussion? Are they linked to the comments of others?
- Is there a willingness to participate and bring new ideas?
- Do the comments show evidence of analysis of the topic or the case?
- Do the comments clarify or build upon the important aspects of earlier comments and lead to a clearer statement of the concepts being covered?

I will take attendance on a regular basis. Attendance is not mandatory but will be considered as a part of your participation score. The relevant contribution to the discussion boards will also be graded and be part of class participation.

### Group Case Presentation

You are required to turn in one complete case analysis. It will be done in a learning team of 4-6 students and your case will be assigned to you after the teams are formed in the third week. Each team will prepare a presentation for the assigned case.

The presentation should cover the following outline:

- Brief discussion of the company and its environment
- Brief description of the problems
- Analysis that links the problems to its causes
- Short term recommendations
- Long term recommendations
- Implementation plan and risks with mitigation plan

Please ensure that the presentation deck is well organized for the outline provided above. You are expected to make a brief (15-20 minute) presentation of your analysis and recommendations.
**Homework Assignments and Case Studies**

There will be ~6 homework assignments, plus case study prep assignments. A typical assignment will consist of several questions related to subject discussed in the previous weeks. The students will submit homework assignments through Brightspace.

All cases must be read before the class they are to be discussed in (whether a presentation submission is required or not). The students may be asked to complete a Qualtrics survey with several discussion questions prior to the class discussion. The link for these Qualtrics surveys will be posted on Brightspace.

**Midterm Exam**

It will be a take-home exam on **July 2nd from 8:00 am – 10:00 pm PT**. Please take this into account when scheduling your trips, particularly as it is right before the 4th July holiday in the US!

**Final Exam**

It will be a take-home exam on **August 6th from 8:00 am – 10:00 pm PT**. The final exam is cumulative. Please take this into account when scheduling your trips! If there are extenuating circumstances that prevent you from taking an exam, you must discuss the reason with me before the time of the exam. You will not be given a make-up exam unless you obtain permission from me in advance. In addition, you must be able to document the extenuating circumstance. If you miss the exam due to a medical emergency that can be documented and verified, then a make-up exam will be given. Otherwise, a grade of zero will be given for the missed exam.

**Simulation Debriefing Reports**

There will be two or three debriefing reports. Each report will ask you to address a specific set of questions related to the interactive project management simulation we will be conducting throughout the semester.

**System Requirements**

- For Brightspace or other technical support go to [USC ITS Services Website](http://www.its.usc.edu) or call USC ITS at 213.740.555

**Technical Support**

- Computer (PC or Mac)
- Headset or built-in speakers & microphone, if possible
- HD Webcam
- High speed Internet connection
- Up-to-date internet browser (Chrome, FireFox, Safari, or Internet Explorer)

**Statement on Academic Conduct**

USC seeks to maintain an optimal learning environment. General principles of academic honesty include the concept of respect for the intellectual property of others, the expectation that individual work will be
submitted unless otherwise allowed by an instructor, and the obligations both to protect one’s own academic work from misuse by others as well as to avoid using another’s work as one’s own (plagiarism). Plagiarism – presenting someone else’s ideas as your own, either verbatim or recast in your own words – is a serious academic offense with serious consequences. All students are expected to understand and abide by the principles discussed in the SCampus, the Student Guidebook (USC SCampus). A discussion of plagiarism appears in the University Student Conduct Code (section 11.00 and Appendix A).

Students will be referred to the Office of Student Judicial Affairs and Community Standards for further review, should there be any suspicion of academic dishonesty. The Review process can be found at: USC Student Judicial Affairs and Community Standards. Failure to adhere to the academic conduct standards set forth by these guidelines and our programs will not be tolerated by the USC Marshall community and can lead to dismissal.

Plagiarism – presenting someone else’s ideas as your own, either verbatim or recast in your own words – is a serious academic offense with serious consequences. Please familiarize yourself with the discussion of plagiarism in SCampus in Part B, Section 11, “Behavior Violating University Standards”. Other forms of academic dishonesty are equally unacceptable. See additional information in SCampus and USC policies on scientific misconduct.

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**Support Systems**

*USC Emergency Information* - [USC Emergency](#)

If an officially declared emergency makes travel to campus infeasible, USC Emergency Information will provide safety and other updates, including ways in which instruction will be continued by means of Brightspace, teleconferencing, and other technology.

*The Office of Disability Services and Programs* – (213) 740-0776

The Disability Services and Programs (DSP) office provides certification for students with disabilities and helps arrange the relevant accommodations. Any student requesting academic accommodations based on a disability is required to register with DSP each semester.

*Student Counseling Services (SCS)* - (213) 740-7711 – 24/7 on call

Free and confidential mental health treatment for students, including short-term psychotherapy, group counseling, stress fitness workshops, and crisis intervention. Go to: [USC Engemann Student Health Center Website](#)

*National Suicide Prevention Lifeline* - 1-800-273-8255

Provides free and confidential emotional support to people in suicidal crisis or emotional distress 24 hours a day, 7 days a week. Go to: [National Suicide Prevention Lifeline](#)

*Relationship & Sexual Violence Prevention Services (RSVP)* - (213) 740-4900 - 24/7 on call

Free and confidential therapy services, workshops, and training for situations related to gender-based harm. Go to: [USC Engemann RSVP Services](#)

*Sexual Assault Resource Center*

For more information about how to get help or help a survivor, rights, reporting options, and additional resources, visit the Website: [Sexual Assault Resource Center](#)
Office of Equity and Diversity (OED)/Title IX compliance – (213) 740-5086
Works with faculty, staff, visitors, applicants, and students around issues of protected class. Go to: Office of Equity and Diversity Website

Bias Assessment Response and Support
Incidents of bias, hate crimes and microaggressions need to be reported allowing for appropriate investigation and response. Go to: USC Student Affairs - Bias Assessment Response and Support

Student Support & Advocacy – (213) 821-4710
Assists students and families in resolving complex issues adversely affecting their success as a student EX: personal, financial, and academic. Go to: USC Student Affairs - Student Support and Advocacy

Diversity at USC – Diversity Matters
Tabs for Events, Programs and Training, Task Force (including representatives for each school), Chronology, Participate, Resources for Students

American Language Institute - ALI
Students whose primary language is not English should check with the American Language Institute, which sponsors courses and workshops specifically for international graduate students.
## Detailed Class Schedule (subject to change)

<table>
<thead>
<tr>
<th>Session Date</th>
<th>Topics and Learning Outcomes</th>
<th>Readings / Assignments / Speakers</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Session 1</strong>&lt;br&gt;5/22</td>
<td><strong>Introduction to Project Management</strong>&lt;br&gt;• Define what is a Project and Project Management&lt;br&gt;• Evaluate why projects fail</td>
<td><strong>Assignments:</strong>&lt;br&gt;• Complete the Introduction survey on Discussion Board by May 22&lt;br&gt;• Complete the Qualtrics survey with your background by May 22&lt;br&gt;• Complete all Virtual Classroom content prior to the live session&lt;br&gt;• Reading prior to live session:&lt;br&gt;  – Article: How AI Will Transform Project Management (Harvard’s Online Reader)&lt;br&gt;  – Article: Why do projects ‘fail’ and more to the point what can we do about (Brightspace)&lt;br&gt;  – (Optional) Ch 1.1-1.3, Ch 3.1-3.4, Ch 4.1-4.4, Ch 5.1-5.8</td>
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<tr>
<td><strong>Principles of Project Management</strong></td>
<td><strong>Project Phases and Strategic Context – Overview</strong>&lt;br&gt;• Describe the phases of project lifecycle&lt;br&gt;• Explain the difference between projects, programs, portfolio</td>
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<td></td>
<td><strong>Project Manager Role and Project Team Structure</strong>&lt;br&gt;• Explain skills and selection of Project Manager and team members&lt;br&gt;• Describe strategies dealing with conflict</td>
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<td><strong>Stakeholders Management</strong>&lt;br&gt;• Explain how to identify and analyze Stakeholders, and approaches to obtain Stakeholders support</td>
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<td></td>
<td><strong>Project Governance and Decision Making</strong>&lt;br&gt;• Define structures and role of Project Management Office (PMO)&lt;br&gt;• Identify operating rules for Steering Committees</td>
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<td><strong>Introduction to Project Financial Evaluation</strong>&lt;br&gt;• Introduce and compare financial metrics – NPV, Payback Period, Weighted Score</td>
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| Session 2 5/29 | **Case studies discussion**  
- Sidney Opera House (identify what makes a successful team and the trade-offs among goals)  
- Astra Zeneca Case Discussion (describe the role and challenges of PMOs)  
**Project Selection – Proposal**  
- Describe how the project concepts are generated  
- Describe the application of feasibility analysis  
**Project Selection – Business Case Approach**  
- Describe numeric and qualitative methods of project concept assessment  
- Identify inputs, outputs, and the use of Business Case  
**Project Selection – Simulation Analysis**  
- Explain Monte Carlo and how to construct simulation models using @Risk  
- Analyze risk-adjusted NPV estimates using @Risk  
**Project Charter and Plan**  
- Describe the difference between project charter and project plan  
- Describe components of Project Plan  
**Work Breakdown Structure**  
- Explain work breakdown structure (WBS) and its levels  
- Describe a RACI matrix and its uses  
**Project Approval Gate and Kick-off**  
- Explain criteria to approve the project to proceed  
- Describe the role of PMO and SteerCo in approving the project  | **Assignments:**  
- Complete Homework 1  
- Complete all Virtual Classroom content prior to the live session  
- Reading prior to live session:  
  - Case Study: Sydney Opera House  
  (Harvard’s Online Reader)  
  - Case Study: Astra-Zeneca (Brightspace)  
  - (Optional) Ch 2.2, Ch 4.5, Ch 6.1, 6.3, Ch 7.4 (starting on page 274)  
**Live Session:**  
Wed 5/29, 6 pm to 9 pm  
- Sydney Opera House & AZ case discussions  
- Virtual Classroom Materials review  
  - Project Selection – Proposal / Idea / Concept  
  - Project Selection – Business Case  
- @Risk worksession  
- WBS exercise  
- Project Governance |
<table>
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<tr>
<th>Session Date</th>
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</table>
| Session 3  
6/5          | **Project Execution Processes and Dynamics**  
- Contrast the roles of Project Manager, Project Team members, and SteerCo members  
- Describe likely pitfalls during project execution  
**Project Scheduling and Use of MS Project**  
- Construct project schedule from WBS  
- Describe Gantt, PERT, and CPM scheduling methods  
**Critical Path Methods and Networks**  
- Design network diagrams  
- Identify critical path, critical time, and slack, using Excel and MS Project  
- Apply critical path analysis to solve a scheduling problem  
**Echelon (A) Case Discussion**  
- Apply the critical path method through an example  
Assignments:  
- Complete Homework 2  
- Complete all Virtual Classroom content prior to the live session  
- Reading prior to live session:  
  – Case Study: Echelon (A) (Brightspace)  
  – (Optional) Ch 8.1, 8.2, 8.4  
**Live Session:**  
Wed 6/5, 6 pm to 9 pm  
- *Guest Speaker  
- Virtual Classroom Materials review  
  – Execution Overview – Interplay of Tasks and Behaviors  
  – Project Scheduling and Use of MS Project  
- Networks and critical path development  
- Echelon A Discussion – MS Project  
*Guest Speaker – TBD |
<table>
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<tr>
<th>Session Date</th>
<th>Topics and Learning Outcomes</th>
<th>Readings / Assignments / Speakers</th>
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<tbody>
<tr>
<td>Session 4</td>
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<tr>
<td>6/12</td>
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<tr>
<td>Probabilistic Scheduling</td>
<td>Scheduling Strategy and Hierarchy</td>
<td>• Define the different level of schedules for a larger project</td>
</tr>
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<td></td>
<td>Uncertainty Management</td>
<td>• Differentiate between pessimistic, optimistic, and likely scheduling scenarios</td>
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<td></td>
<td>• Find probability of completing the project under different scheduling scenarios</td>
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<td></td>
<td>Applying Simulation Analysis to Managing Timeline Uncertainty</td>
<td>• Describe how to evaluate scheduling bias</td>
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<td>• Evaluate the probability of successful project</td>
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<td></td>
<td>Harvard Simulation Game (A)</td>
<td>• Explain how the three objectives of the project are linked together</td>
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<td>• Explain how to manage project team morale during the project</td>
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<td>Echelon (B) Case discussion</td>
<td>• Evaluate probabilistic duration and critical path under different conditions</td>
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<td>Assignments:</td>
<td>• Complete Homework 3</td>
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<td>• Complete all Virtual Classroom content prior to live session</td>
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<tr>
<td></td>
<td></td>
<td>• Reading prior to live session</td>
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<tr>
<td></td>
<td></td>
<td>– Case Study: Echelon (B) (Brightspace)</td>
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<tr>
<td></td>
<td></td>
<td>– Harvard Simulation Game description (Harvard’s Online Reader)</td>
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<td></td>
<td>– (Optional) Ch 8.3, 8.4</td>
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<tr>
<td>Live Session</td>
<td></td>
<td>Wed 6/12, 6 pm to 9 pm</td>
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<tr>
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<td></td>
<td>• Virtual Classroom Materials review</td>
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<td></td>
<td>– Schedule Hierarchy</td>
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<td>– Timeline Uncertainty Management</td>
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<td></td>
<td>• Managing Timeline Uncertainty</td>
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<td></td>
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<td>• Introduction to Harvard Simulation</td>
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<td>• Echelon B Discussion - Probabilistic duration</td>
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Note: No Live Session on 6/19 due to a Holiday!
<table>
<thead>
<tr>
<th>Session Date</th>
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</table>
| Session 5   | Resource Identification and Allocation  
- Explain resource loading and leveling  
- Describe methods for resource on-boarding, management, and roll-off  
Resource Management – Heuristic Approach  
- Model future resources needs  
- Identify resources with overallocation constraints, and how to manage them  
- Apply MS Project for resource management  
Echelon (C) Case Discussion  
- Evaluate resource management, cost trade-offs, expediting  
- Conduct working session  
Product Management  
- Explain difference between product and project management  
- Describe “design thinking”  
Mid-Course Review and Midterm Prep  
| Assignments:  
- Complete Harvard Simulation – scenario A  
- Complete Homework 4  
- Complete all Virtual Classroom content prior to the live session  
- Reading prior to live session:  
  - Case Study: Echelon (C) (Brightspace)  
  - (Optional) Ch 9.1-9.6  
Live Session:  
Wed 6/26, 6 pm to 9 pm  
- *Guest Speaker  
- Simulation Game (A) debrief  
- Virtual Classroom Materials review  
  - Resource Allocation  
  - Resource Management – Heuristics  
  - Resource Allocation with MS Project  
- Echelon (C) case worksession  
- Product management and design thinking  
- Midterm Exam prep  
*Guest Speaker – TBD  
<p>| 6/26 |  |  |</p>
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<tr>
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<th>Readings / Assignments / Speakers</th>
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<tbody>
<tr>
<td>Session 6</td>
<td>Take-home mid-term between 8 am and 10 pm</td>
<td>NA</td>
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<td>7/3</td>
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<tr>
<td>Midterm</td>
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| Session 7 7/10 | Project Budgeting and Costing  
- Describe the purpose of project budgeting and why it is difficult  
- Explain top-down and bottom-up methods and supporting techniques  
- Explain how to address uncertainty with cost estimates  

Earned Value Analysis and Management  
- Explain the earned value analysis  
- Calculate earned value, planned value, and actual cost for a project  
- Define key EVM performance indices and cost estimates for project completion  

Risk Management  
- Identify what is a “risk” in the project  
- Describe risk management approaches  
- Explain the sources and methods for risk identification  

Introduction to Case Study Projects  
- WillowTree: Project Driven with a Product Mindset  
- Going with the Flow: Agile Development at Dell  
- Le Petit Chef (TBC)  
- Executing the Bogibeel Bridge for Social Impact  
- Boeing 767: From Concept to Production  

Assignments:  
- Virtual Classroom content prior to the live session  
- Reading prior to live session:  
  - Article: Why do projects seem to go bad right at the end? - The Hidden Risks in Earned Value Measurement (Brightspace)  
  - (Optional) Ch 7.1-7.4, 10.3  

Live Session:  
Wed 7/10, 6 pm to 9 pm  
- *Guest speaker  
- Virtual Classroom Materials review  
  - Budgeting and Costing  
  - Risk Management (primer)  
- Earned Value Analysis – worksession  
- Risk Management methods  
- Briefing on the case studies for final presentation (all available through Harvard’s Online Reader)  

*Guest Speaker – TBD
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| Session 8 7/17 | **Monitoring and Control**  
• Explain how to design Monitoring and Controls system  
• Describe Senior Management controls (gate reviews, exception reviews)  

**Time-Cost Tradeoff Analysis**  
• Calculate minimum cost of an activity for a given duration  
• Optimize time-cost trade-off for a deadline constraint  
• Optimize time-cost trade-off for a budget constraint  

**Agile and Hybrid Methods During Project Lifecycle**  
• Identify when and how to apply Agile – during Selection, Planning, Execution, Closure  
• Compare the benefits of Waterfall, Agile, Critical Chain and Lean  

**Case Presentation prep**  
• Presentation guidelines and check-in on progress  

**Harvard Simulation Game (B)**  
• Address unplanned issues with the project to minimize impact  

**Assignments:**  
• Homework 5  
• Virtual Classroom content prior to the live session  
• Reading prior to live session – case studies as appropriate for the assigned groups (Harvard’s Online Reader)  
  – WillowTree: Project Driven with a Product Mindset  
  – Going with the Flow: Agile Development at Dell  
  – Le Petit Chef (TBC)  
  – Executing the Bogibeel Bridge for Social Impact  
  – Boeing 767: From Concept to Production  
• Additional reading:  
  – (Optional - Agile-related textbook chapters) Ch 1.4, Ch 2.1 Ch. 4  

**Live Session:**  
Wed 7/17, 6 pm to 9 pm  
• Virtual Classroom Materials review  
  – Monitoring and Controls  
• Key controls during project execution  
• Time-cost tradeoff – worksession  
• Application of Agile methods  
• Case Presentation prep. – open forum
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</table>
| Session 9 7/24 | **Communication and Stakeholder Management**  
- Identify challenges and risks with poor communication  
- Define different methods of communication  
- Describe how to prepare communication plans  
**Project Evaluation and Auditing**  
- Explain project evaluation and its purpose  
- Explain project auditing and list steps in a project audit  
**Closing Project**  
- Define the post go-live support period and structures  
- Explain how to embed project outcomes into functional organizations  
**Team Presentations:**  
- WillowTree: Project Driven with a Product Mindset  
- Going with the Flow: Agile Development at Dell  
- Le Petit Chef (TBC)  
- Executing the Bogibeel Bridge for Social Impact  
- Boeing 767: From Concept to Production  | **Assignments:**  
- Virtual Classroom content prior to the live session  
- Case Study presentations submission (day before the class)  
- Reading prior to live session  
  - (Optional) Ch 12, 13  
**Live Session:**  
Wd 7/24, 6 pm to 9 pm  
- Virtual Classroom Materials review  
  - Effective Communications  
  - S/H Management  
- Transition of project’s results into the functional organization  
- Case Studies Presentations |
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| Session 10  
7/31  
Portfolio Management, The Future of PM | **Project Portfolio Management (PPM)**  
- Identify project categories, criteria, and boundaries  
- Explain approach for managing portfolio stakeholders and management reviews  
- Describe methods for setting goals and boundaries  

**Portfolio Selection Analysis**  
- Develop an optimization model for portfolio selection problem  
- Select the best set of project for given constraints  

**The Future of Project Management**  
- Describe the tug-of-war between project and functional organizations  
- Explain evolution of traditional structures  
- Open-mic discussion  

**Finals Prep**  
- Practice questions for next week’s finals | **Assignments:**  
- Homework 6  
- Virtual Classroom content prior to the live session  
- Reading prior to the live session  
  - (Optional - PPM-related) Ch 2.3  
  - (Optional) Ch 5.7, Ch 6.2, Ch 7.1, Ch 8.5, Ch 10.4, Ch 11.3, Ch 11 (end of chapter reading), Ch 13.2  

**Live Session:**  
Wed 7/31, 6 pm to 9 pm  
- Virtual Classroom Materials review  
  - Portfolio Management  
  - Portfolio Selection (primer)  
- Portfolio selection - worksession  
- Discussion – the future of project management  
- Final Exam prep |
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<td>Session 11 8/6</td>
<td>Take-home final between 8 am and 10 pm</td>
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<td>Final</td>
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