H. JOHN HEINZ III COLLEGE | CARNEGIE MELLON UNIVERSITY PROJECT MANAGEMENT SPRING 2024 – 94813 A3 / B3 COURSE SYLLABUS

INSTRUCTOR TEACHING ASSISTANTS

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Office Hours: By Appointment TA Office Hours (Zoom): Will be posted on the Canvas

Announcements page

COURSE DESCRIPTION

As organizations continue to look for ways to reduce costs, managers are often expected to oversee special projects in addition to their traditional responsibilities. When a project is too complex for one person to handle, the project manager is expected to lead a team of diverse employees to complete the assignment. This course will assist the project manager to break down a complex project into manageable segments, lead a diverse project team, and use effective tools to ensure that the project meets its deliverables and is completed within budget and on schedule. Over the course of the mini, students will complete a plan for an actual project, giving them valuable experience with the relevant tools and skills, including Microsoft Project software.

COURSE OBJECTIVES	HOW ASSESSED	
Upon completion of this course, the student will be able to:		
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 Implement the key steps involved in managing a project 	• Assignments 1, 2, 3, 4, 5, 6	
Organize the project into manageable components	• Assignments 1, 2, 3, 4, 5, 6	
Successfully lead project teams and work with	• Assignments 1, 2, 3, 4, 5, 6	
stakeholders	Class Participation	
Use effective tools to oversee and monitor complex	• Assignments 1, 2, 3, 4, 5, 6	
projects		
Develop project budgets and schedules	 Assignments 3,4 	
Bring complex projects to successful completion	Assignment 6	
Use Microsoft Project to create a project plan and	Assignment 5	
monitor progress		
Develop a comprehensive project plan which is	Assignment 6	
ready for implementation		
Analyze and apply lessons from other actual projects	Class Participation	

This document is divided into three components, each beginning on the following pages:

- Page 1: Course purpose, expectations, instructions, grading, and deadlines
- Page 7: Support and resources
- Page 9: Course daily schedule and due dates

COURSE STRUCTURE AND MODALITY

The modality for all sections of this course is In Person Expectation (IPE). However, this is a "flipped" course format, and most lectures have been videotaped and are to be viewed asynchronously on Canvas prior to the date noted on the syllabus. Class sessions (in person at scheduled times) will be for discussion of concepts, cases, exercises, current events and providing examples of completed assignments.

COURSE ANNOUNCEMENTS AND DISCUSSION BOARD POSTS

Students are responsible for ensuring that they receive all notifications regarding the course. As such they need to go to <u>Canvas / Account (Upper Left) / Notifications then select the checkmarks next to three areas:</u>

<u>Announcement, Discussion and Discussion Post</u>. There is also a Canvas app that provides notifications regarding the course.

CLASS ATTENDANCE

Attendance at classes is critical for successful completion of the course. Students will be expected to watch prerecorded lectures and download relevant course materials from Canvas prior to class. The professor frequently provides verbal explanations, clarification and instructions regarding concepts, assignments, and course deliverables during class time. Examples of project plans may also be reviewed and discussed during class. It is assumed that students will attend every class in its entirety and take notes in order to ensure that they do not miss this essential part of the course. Since students will be expected to view lectures outside of course time, there will be fewer required in-class sessions as noted on the syllabus.

MICROSOFT PROJECT TUTORIAL

By the end of this course, students are expected to have acquired basic skills with Microsoft Project, a commonly used project management software product employed in many industries. A tutorial will be held either during class or asynchronously.

REQUIRED SOFTWARE

Students are required to either install or access via Heinz Virtual Lab two software programs for this class:

- Microsoft Visio 2019 or 2021 (Optional for Assignment 4) and
- Microsoft Project Professional 2019 or 2021 (Required for Assignment 6)

Both Microsoft Project and Visio are free for CMU students. Instructions are available on Canvas under Modules. Please be sure to read the detailed instructions posted on Canvas! At the end of the drop/add period, I will be sending a list of non-Heinz students to Heinz Computing Services so that those students can gain access to the Heinz Virtual Lab. Please test these programs at the start of the Mini so that you have time to contact Heinz Computing Services (heinz-computing@andrew.cmu.edu) if you experience any problems. Note that the office is not staffed after regular business hours.

ETHICAL STANDARDS

Students are expected to maintain the highest ethical standards with respect to plagiarism and cheating. Neither plagiarism nor cheating will be tolerated on any exercises, quizzes, exams or assignments. Students may collaborate with others only when expressly permitted by the instructor. Students who violate academic standards will at a minimum receive a failing grade for the assignment and may also receive a failing grade for the course. Such cases will be referred to the Associate Dean, who may decide to take further action.

STUDENTS MAY NOT USE GENERATIVE AI IN ANY FORM

To best support your own learning, you should complete all graded assignments in this course yourself, without any use of generative artificial intelligence (AI). Please refrain from using AI tools to generate any content (text, video, audio, images, code, etc.) for an assignment or classroom exercise. Passing off any AI generated content as your own (e.g., cutting and pasting content into written assignments, or paraphrasing AI content) constitutes a violation of CMU's academic integrity policy. If you have any questions about using generative AI in this course please email or talk to me.

REQUIRED READINGS

<u>There is no required textbook for the class.</u> Students are, however, required to read cases that will be discussed in class and are available on Canvas.

Many students prefer to supplement class lectures with readings, so the following books are recommended, but are not available in the CMU bookstore:

- Pinto, Jeffrey K., <u>Project Management, Achieving Competitive Advantage</u> (5nd Edition), Prentice Hall 2019
 I ISBN-10: 0136065619 I ISBN-13: 978-0136065616
- Project Management Institute, <u>A Project Management Body of Knowledge (PMBOK Guide)</u> (7th Edition)
- Mantel, Samuel J., Jack R. Meredith, Scott M. Shafer, Margaret M. Sutton, <u>Project Management in</u>
 <u>Practice</u> (7th Edition), Wiley 2020

OFFICE HOURS AND QUESTIONS REGARDING THE ASSIGNMENTS

The teaching assistants (TAs) will hold weekly office hour sessions throughout the mini for students to ask questions about the assignments. All other questions regarding the course or assignments should be posted to the Canvas discussion board. In this way, all students will be able to review answers to other questions. All students are required to monitor the discussion board on a frequent basis to ensure that they have up to date information since the board is also used to post clarifications regarding the assignments. It is suggested that each student subscribe to each of the seven threads to be notified of posts. The instructor and the TAs will be checking the discussion board Monday-Friday and occasionally on weekends. Please note that questions received via e-mail or phone, and last minute questions regarding an assignment will not be answered. Personal questions regarding the course should be directed to the instructor.

USE OF ELECTRONIC DEVICES

Laptops, tablets, cell phones and other electronic devices are <u>not</u> permitted in class. There are two reasons for this:

- Research on learning shows that unexpected noises and movement automatically divert and capture
 people's attention, which means you are affecting everyone's learning experience if your cell phone,
 laptop, etc. makes noise or is visually distracting during class.
- The use of electronic devices in past sections of Project Management has demonstrated that they are too distracting for students and can have an adverse effect on class performance.

There will be specific days when students will be working on assignments during class sessions, and there will be advance notice that laptops would be permitted on those days.

RECORDING OF CLASS SESSIONS

No student may record or tape any classroom activity without the express written consent of the instructor. If a student believes that he/she is disabled and needs to record or tape classroom activities, he/she should contact the Office of Equal Opportunity Services, Disability Resources to request an appropriate accommodation.

For this course, I will be recording class sessions and making them available to you after classes for your personal, educational use. Recordings of class sessions are covered under the **Family Educational Rights and Privacy Act** (**FERPA**) and must *not* be shared with anyone outside your course-section. The purpose of these recordings is so students in this course (and only students in this course) can watch or re-watch past class sessions. The recordings are not a substitute for coming to class (you won't be able to join class remotely), and they will only become available after that day's class sections are finished. Feel free to use the recordings if you would like to review something we discussed in class or if you are temporarily unable to attend class. The pre-recorded lectures are also available for you to watch a second time, and the same restrictions apply.

COURSE PERFORMANCE EVALUATION

Student performance will be evaluated based on performance in two categories, Project Plan Assignments and Course Engagement:

Project Plan Assignments

Students will be asked to complete a comprehensive project plan incorporating lectures, class discussions, cases, and Microsoft Project software. Since this is the primary deliverable of the class, it is weighted the most heavily. The project plan is broken into seven assignments, worth 90% of the student grade.

Project Selection: Select a group project that has been completed and on which you worked in some capacity, and develop a Project Plan for that project. (This is *not* a group assignment.) Refer to sample documents on Canvas for templates of many of the required components for your Project Plan, in addition to examples given in class. Examples of appropriate projects include:

- a group assignment at school,
- a group project at work,
- planning an event
- developing a program or training, etc.

The project needs to have a minimum of 10 tasks (preferably more) and should have duration of at least two weeks. No two students can select the same project, so please check with other team members to ensure that they aren't planning to use the same project for their assignments.

It is highly recommended that you go to office hours after the first class to speak with a TA about the appropriateness of your project for the course.

Assignment Grading Methodology: Each assignment of the Project Plan will be graded according to the rubrics which are included in the second part of this document, "Project Plan Assignments." The rubrics for each assignment outline what meets and does not meet requirements, and are used for Canvas grading. Be sure to follow the rubrics in the syllabus and make sure you complete the necessary components, then you can view the Canvas rubrics to see point distribution before you submit your assignment. All templates presented in class must be followed.

Each assignment is worth 100 points and required components will be graded as follows:

- Meets Requirements: The assignment meets the basic requirements in all areas outlined on the rubric
- <u>Does Not Meet Requirements</u>: The assignment doesn't meet basic requirements, is incorrect or is incomplete.
- Exceeds Requirements: Those assignments which go over and above requirements will receive higher scores. Students will need to show initiative in finding ways to exceed requirements; they are not provided in the rubrics. Some assignments do not lend themselves to exceeding requirements, but since final grades are curved, students are not penalized for those assignments. Examples of ways that exceed requirements include but are not limited to:
 - o in-depth analysis, exceptional writing, and other demonstration of additional effort
 - thoroughness and comprehensive descriptions
 - o inclusion of additional project plan components which are covered in class, or which the student researches on his or her own time

Additional detail, analysis and components which require the most <u>effort</u> will receive the most credit. Note that any additional components or analyses need to be <u>accurate and complete</u> to receive credit. Also, they should be provided at the time that they are relevant to the assignment (for example, comprehensive budget calculations and explanations should be provided when the budget is due).

Note that actual project plans submitted by former students are sometimes used in class and TA office hours as examples, but since such plans were submitted in prior semesters, they do not necessarily meet current assignment instructions. <u>Always refer to the assignment instructions in the syllabus for current semester requirements</u>.

Project Submission Instructions:

- 1. For all assignments, please save your files with your *last name in the title* (for example, "SmithProjectPlan1.pdf").
- 2. If you make any assumptions in the development of any part of your project plan, please put those assumptions in writing in a Word or PDF document and submit the document with your assignment.
- 3. <u>For Assignment 5 Only</u>: For this Microsoft Project (MSP) assignment, submit the entire Microsoft Project file to Canvas by the deadline outlined on the syllabus, and name the MSP file with your last name in the title ("SmithMSProject.msp").

Late Assignments:

Points will be taken off for late and incomplete submissions. A *late* assignment is one that is not submitted by the due date at <u>6:00pm</u>, evidenced by the Canvas time stamp. An *incomplete* assignment is missing key components.

Students should notify the instructor if they intend to submit their assignment late, but point deductions will still occur. No late assignments will be accepted after 6:00pm on the following day (24 hours after the posted deadline).

Point deductions:

- **10 points (Late):** Assignment was late but all requirements and versions were submitted before the late deadline at 6:00pm.
- (Incomplete): An assignment component is absent by the late deadline at 6:00pm and will be scored based on what is submitted.
- 100 points (Missing): Nothing is submitted before the late deadline at 6:00pm.

Course Engagement

There are three components to the course engagement score: Preparation, attendance and participation. Experience has shown that the class engagement score can often increase or decrease a student's final course grade.

Attendance plays a critical role in course performance, and it is taken at the start of class. Students are permitted one absence during the mini, which can be used for illness, travel, a job interview or other reason. Additional absences will result in a lower score. If you are facing extraordinary circumstances, please email me at synnott@cmu.edu so that I may be of assistance in ensuring that you don't fall behind in your coursework.

Students are expected to consistently participate in class discussions throughout the mini. It is also evidenced by coming to class prepared to discuss assigned cases or current events. The instructor will assess participation throughout the course as follows:

- a. Low: Does not or rarely participates
- b. Medium: Participates on a moderate level
- c. High: Actively and appropriately participates

Students will be required to submit a short reading reflection **prior to class** for each of the 2 cases discussed in the course. A separate document will be posted on Canvas with instructions.

Overall Course Performance

Performance will be evaluated according to the following weights:

1.	Assignment 1	12%
2.	Assignment 2	15%
3.	Assignment 3	15%
4.	Assignment 4	15%
5.	Assignment 5	15%
6.	Assignment 6	15%
7.	Case Reading Reflections (2)	6%
8.	Class Attendance and Participation	7%
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Total (graded on a curve) 100%

<u>Final grades are based on a curve</u> and are assigned based on your *relative* performance in comparison to classmates' performance. The Heinz College faculty has endorsed guidelines for assigning grades, stating that the mean grade in an elective course should be approximately 3.5 (B+ / A-).

Corrections to Previously Submitted Assignments:

<u>Assignment 6 Consolidated Plan</u>: Students are required to make revisions and corrections to previous assignments and incorporate them into the consolidated version for Assignment 6. Such corrections are necessary in order to meet the requirements for the final assignment and will not qualify for extra points or result in a re-grade of previous assignments.

Due Date Schedule (this is also posted on Canvas)

Assignment	Date Deadline	Time Deadline
Syllabus Attestation	Saturday January 20	11:59pm
Brief Project Summary	Monday January 22	11:59pm
1	Thursday January 25	6:00pm
2	Thursday February 1	6:00pm
Case Reading Reflection	Monday February 5	2:00pm
3	Thursday February 8	6:00pm
Case Reading Reflection	Monday February 12	2:00pm
4	Thursday February 15	6:00pm
5	Thursday February 22	6:00pm
6	Thursday February 29	6:00pm

As noted on page 5, assignments received within 24 hours of the deadline will receive a late penalty. No assignments will be accepted beyond 24 hours after the deadline.

SUPPORT AND RESOURCES

Accommodations for Students with Disabilities: If you have a disability and have an accommodations letter from the Disability Resources office, I encourage you to discuss your accommodations and needs with me as early in the semester as possible. I will work with you to ensure that accommodations are provided as appropriate. If you suspect that you may have a disability and would benefit from accommodations but are not yet registered with the Office of Disability Resources, I encourage you to contact them at access@andrew.cmu.edu.

We must treat every individual with respect. We are diverse in many ways, and this diversity is fundamental to building and maintaining an equitable and inclusive campus community. Diversity can refer to multiple ways that we identify ourselves, including but not limited to race, color, national origin, language, sex, disability, age, sexual orientation, gender identity, religion, creed, ancestry, belief, veteran status, or genetic information. Each of these diverse identities, along with many others not mentioned here, shape the perspectives our students, faculty, and staff bring to our campus. We, at CMU, will work to promote diversity, equity and inclusion not only because diversity fuels excellence and innovation, but because we want to pursue justice. We acknowledge our imperfections while we also fully commit to the work, inside and outside of our classrooms, of building and sustaining a campus community that increasingly embraces these core values.

Each of us is responsible for creating a safer, more inclusive environment. Unfortunately, incidents of bias or discrimination do occur, whether intentional or unintentional. They contribute to creating an unwelcoming environment for individuals and groups at the university. Therefore, the university encourages anyone who experiences or observes unfair or hostile treatment on the basis of identity to speak out for justice and support, within the moment of the incident or after the incident has passed. Anyone can share these experiences using the following resources:

- Center for Student Diversity and Inclusion: csdi@andrew.cmu.edu, (412) 268-2150
- **Ethics Reporting Hotline**. Students, faculty, and staff can anonymously file a report by calling **844-587-0793** or visiting **cmu.ethicspoint.com**.

All reports will be documented and deliberated to determine if there should be any following actions. Regardless of incident type, the university will use all shared experiences to transform our campus climate to be more equitable and just.

Food Insecurity

If you are worried about affording food or feeling insecure about food, there are resources on campus that can help. Email the CMU Food Pantry Coordinator to schedule an appointment:

Pantry Coordinator / cmu-pantry@andrew.cmu.edu / 412-268-8704 (SLICE office)

Communication Assistance: The **Student Academic Success Center (SASC)** provides resources to all students in the following areas:

- Academic Coaching This program provides holistic, one-on-one peer support and group workshops to help undergraduate and graduate students implement habits for success. Academic Coaching assists students with time management, productive learning and study habits, organization, stress management, and other skills. Request an initial consultation here.
- <u>Peer Tutoring</u> Peer Tutoring is offered in two formats for students seeking support related to their coursework. Drop-In tutoring targets our highest demand courses through regularly scheduled open tutoring sessions during the fall and spring semesters. Tutoring by appointment consists of ongoing individualized and small group sessions. You can utilize tutoring to discuss course related content, clarify

and ask questions, and work through practice problems. Visit the <u>webpage</u> to see courses currently being supported by Peer Tutoring.

- Communication Support Communication Support offers free one-on-one communication consulting as well as group workshops to support strong written, oral, and visual communication in texts including IMRaD and thesis-driven essays, data-driven reports, oral presentations, posters and visual design, advanced research, application materials, grant proposals, business and public policy documents, data visualization, and team projects. Appointments are available to undergraduate and graduate students from any discipline at CMU. Schedule an appointment (in-person or video), attend a workshop, or consult handouts or videos to strengthen communication skills.
- <u>Language and Cross-Cultural Support</u> This program supports students seeking help with language and
 cross-cultural skills for academic and professional success through individual and group sessions. Students
 can get assistance with writing academic emails, learning expectations and strategies for clear academic
 writing, pronunciation, grammar, fluency, and more. <u>Make an appointment</u> with a Language Development
 Specialist to get individualized coaching.

Take care of yourself.

The last few years have been challenging. We are all under a lot of stress and uncertainty at this time. I encourage you to find ways to move regularly, eat well, and reach out to your support system or me (synnott@cmu.edu) if you need to. We can all benefit from support in times of stress, and this semester is no exception.

This course's workload is divided into manageable weekly segments. Do your best to maintain a healthy lifestyle this semester by eating well, exercising, avoiding drugs and alcohol, getting enough sleep and taking some time to relax. This will help you achieve your goals and cope with stress.

All of us benefit from support during times of struggle. You are not alone. There are many helpful resources available on campus and an important part of the college experience is learning how to ask for help. Asking for support sooner rather than later is often helpful.

If you or anyone you know experiences any academic stress, difficult life events, or feelings like anxiety or depression, we strongly encourage you to seek support. Counseling and Psychological Services (CaPS) is here to help: call 412-268-2922 and visit their website at http://www.cmu.edu/counseling/. Consider reaching out to a friend, faculty or family member you trust for help getting connected to the support that can help.

If you or someone you know is feeling suicidal or in danger of self-harm, call someone immediately, day or night: CaPS: 412-268-2922 or Re:solve Crisis Network: 888-796-8226

If the situation is life threatening, call the police: **On campus: 412-268-2323 or off campus: 911.** If you have questions about this or your coursework, please let me know.

PROJECT MANAGEMENT 94-813 SCHEDULE

Pre-recorded lectures and required readings are to be reviewed <u>before</u> the date listed on the syllabus.

Wednesday January 17, 2024

Topics

Course Overview – students will need to read the syllabus before or shortly following class.

Pre-Recorded Lectures

- Course Overview [minor note: the lecture incorrectly mentions 7 assignments (instead of 6), and as a result, assignment numbers are also incorrect. The essential content is correct.]
- Project Management Overview
- The Triple Constraint
- Project Selection for Assignments (this is a short slide deck with no recording)

Students are required to do the following:

- 1. Acknowledge on Canvas by Saturday January 20 that they have read the syllabus and understand the course requirements. The Syllabus Attestation can be found under Assignments.
- Ensure that they receive all notifications regarding the course. As such they must go to <u>Canvas / Account</u> (<u>Upper Left</u>) / <u>Notifications then select the checkmarks next to three areas: Announcement, Discussion and Discussion Post.
 </u>

Monday January 22, 2024

Topics

- Scope Management
- The Project Lifecycle

Pre-Recorded Lectures

- Scope Management
- Scope Statement
- Project Management Roles
- Project Lifecycle

Monday January 22, 2024

PROJECT SUMMARY DUE on Canvas: Brief Document on key project elements

Wednesday January 24, 2024

Topics

- Scope Management, continued
- Work Breakdown Structure
- Duration Estimates for the Work Breakdown Structure
- Stakeholder Analysis
- Lifecycle Effects

Pre-Recorded Lectures

- Stakeholder Analysis
- Work Breakdown Structure
- Duration Estimates
- Lifecycle Effects (if unavailable on Canvas, we'll be covering this in class)

Thursday January 25, 2024

<u>ASSIGNMENT 1 DUE on Canvas</u>: Scope Statement: justification, description, deliverables, known exclusions and objectives

Monday January 29, 2024

Topic

- Time Management
- Critical Path Method (we'll do this in class)

Pre-Recorded Lectures

• Time Management

Wednesday January 31, 2024 - NO CLASS, but students are required to watch pre-recorded lectures

Topic

- Time and Critical Path, continued
- The Change Control System

Pre-Recorded Lectures

- Time and Critical Path, continued this is very important for the assignment!
- Change Control System

Thursday February 1, 2024

ASSIGNMENT 2 DUE on Canvas: Stakeholder Analysis and Work Breakdown Structure

Monday February 5, 2024

READING REFLECTION DUE on Canvas Before Class Starts: Obama's Trauma Team Case

Monday February 5, 2024 - NOTE: Read Case, Submit Reading Reflection and Watch Lecture Before Class

Topics

- Class Discussion of Obama's Trauma Team Case
- Team Leadership

Reading

• Case: Obama's Trauma Team (on Canvas)

Pre-Recorded Lectures

Leading the Team

Wednesday February 7, 2024 - NO CLASS, but students are required to watch pre-recorded lectures

Topics

- Cost Management
- Quality Management

Pre-Recorded Lectures

- Estimating Costs
- The Activity Based Budget
- Quality Management

Thursday February 8, 2024

ASSIGNMENT 3 DUE on Canvas: Network Diagram with highlighted Critical Path

Monday February 12, 2024

READING REFLECTION DUE on Canvas Before Class Starts: Petersen Events Center Case

Monday February 12, 2024 - NOTE: Read Case and Submit Reading Reflection Before Class

Topics

- Class Discussion of Petersen Events Center Case
- Fast Track Projects

Reading

• Case: Petersen Events Center Case (on Canvas)

Wednesday February 14, 2024 - Bring Laptops to Class

Topic

• Microsoft Project (MSP) - download software or access via Heinz Virtual Lab before class

Reading

 Microsoft Project Tutorial document (will be available on Canvas and a paper copy will be distributed in class to follow along with tutorial)

Thursday February 15, 2024

ASSIGNMENT 4 DUE on Canvas: Budget and Quality Management Plan

Monday February 19, 2024 - Bring Laptops and Microsoft Project Tutorial document to class

Topic

- Microsoft Project Tutorial (continued)
- Course Evaluations

Wednesday February 21 - NO CLASS, but students are required to watch pre-recorded lectures

Topics

- Risk Management
- Agile Project Management

Pre-Recorded Lectures

- Risk Management
- Agile Project Management

Thursday February 22, 2024

ASSIGNMENT 5 DUE on Canvas: Microsoft Project Assignment

Monday February 26, 2024 - Catch Up Day

Topics

Course Catch Up

Wednesday February 28 - LAST DAY OF CLASS

Topics

- Course Wrap-Up
- Leadership Attributes of Effective Project Managers
- Managing Projects in Different Organizational Structures / Formal Recognition of Authority

Pre-Recorded Lectures

- Organizational Structures
- (Optional) PMP and CAPM Certification
- (Optional) Program Management Office

Thursday February 29, 2024

ASSIGNMENT 6 DUE on Canvas: Consolidated Project Plan, Lessons Learned, Risk Management Plan

Note:

Student project plans may be shared with future classes as examples, but they will <u>not</u> be made available for downloading or copying. If a student does not wish to have his or her plan shared, he or she should notify the instructor by email.

End of Syllabus Document