Fall 2020

EM 636-851: Project Management

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EM636 SYLLABUS

EM 636 Project Management Distance Learning

Instructor: Ava Heuer

Overview: This course is a 100% distance-learning course. We will never meet face to face. All lectures, assignments, quizzes, and exams are done through Canvas. For most homework assignments students will work in virtual teams on a mock project to develop various parts of the Project Plan. This will require participation, teamwork, time, and effort, all in a “virtual” environment. There will also be weekly Discussion Questions posted to exchange ideas about particular concepts from that week’s lecture. Participation in the Discussion Questions as well as your level of participation in the team assignments will affect your final grade, especially if you are near the border between grades. I will also hold a weekly Skype Q&A session on Wednesday evenings at 8:15pm ET to discuss key points of the lecture material and to answer any questions anyone may have. There will also be some WebEx sessions for specific topics that require more explanation.

First Steps

This is a list of the first things to do when starting this course.

1.) Read the Academic Honor Code Link at the top of the course Canvas page and indicate your acceptance of it in the “Introduce Yourself” Discussion Thread.

2.) Read ALL the information in the various links posted under Welcome Kit on the course Canvas page.

3.) Reply to the "Introduce Yourself" thread in the Discussions or in the Introduce Yourself Module.

4.) Follow the directions in the “Post Your Skype ID” thread in Discussions

5.) Do the pre-class assignment reading

6.) Any questions at all, contact me anytime at heuer@njit.edu
Course Learning Objectives

By the end of this course, you should:

- Understand how to plan a project effectively
- Know what all the different parts of a project plan are (it's way more than a schedule!)
- Know what type of information is included in each subsidiary plan of the overall project plan
- Understand the importance of a Work Breakdown Structure and be able to create one
- Know how to calculate the critical path of a project schedule and understand what it is and why it is important
- Be able to use different types of estimation techniques
- Know what it means to baseline a project
- Understand why baselining is important and how it is used as you execute a project
- Understand the importance of a formal change control process and how to implement it
- Be able to apply the soft skills of project management such as conflict management, communications, motivation
- Gain experience in working in and managing teams
- Know how to analyze and manage project risks
- Know various techniques for measuring project performance
- Know how to apply the various quality control tools
- Be familiar with the different types of contracts and how to calculate contract prices based on incentive fees
- Know how to formally close-out a project

Course Outline

Below is a summary of the topics covered each week, along with the assignments.

Note: What is listed here are just the titles of the assignments. Details for each assignment are delineated in the Assignments link under each Week on our Canvas page. The assignments have directions, due dates, and in most cases, templates for you to use. What is listed here are just the titles.
Week 1 – Project Management Fundamentals I

- Definition of a project
- Triple constraint and trade-off analysis
- Different types of project lifecycles

Week 2 – Project Management Fundamentals II

- Process groups, processes, knowledge areas
- Stage gates
- Organization structures

Week 2 Assignment:

1. No assignment, but there will be a Quiz covering weeks 1 and 2 which will count as homework

Notes:
Team Assignments will be announced after Week 2
A set of team projects will be distributed for your selection after Week 2

Week 3 – Human Resource Management

- Team roles and responsibilities
- Team development
- Management skills
- Motivation Theories

Week 3 Assignments:

1. Team Personality Assessments and Team Approach Based on Assessments
2. Team Charter (Ground Rules)

Week 4 – Initiating a Project

- Developing a project charter
- Generating Requirements

Week 4 Assignments:
1. Perform a Project Stakeholder Analysis
2. Develop a Project Charter

**Week 5 - Developing the Scope Baseline**

- Writing a Scope Statement
- Developing the Work Breakdown Structure

Week 5 Assignments:

1. Create an Outline for a Scope Management Plan
2. Develop a Scope Statement
3. Create a partial Work Breakdown Structure

**Week 6 – Developing the Schedule Baseline**

- Activity Definition
- Activity Sequencing
- Resource and Duration Estimating
- Developing the Schedule

Week 6 Assignments:

1. Create an Outline for a Schedule Management Plan
2. Develop Duration Estimates and Basis of Estimates for Activities from 2 Work Packages of your WBS

**Week 7 – Developing the Cost Baseline**

- Schedule analysis and compression techniques
- Cost budgeting
- Developing the cost baseline

Week 7 Assignments:

1. Create an outline for a Cost Management Plan
2. Develop the Cost Estimates and Basis of Estimates for Activities from Assignment 6

**Midterm Exam covering weeks 1-7**
**Week 8 – Planning Quality**

- Developing a Quality Plan
- Developing the Quality Baseline
- Cost of Quality
- The Quality “Gurus”
- Quality Metrics

**Week 8 Assignments:**

1. Write a Quality Policy
2. Create Quality Product and Process Metrics

**Week 9 – Communications Management**

- Developing a Communications Plan
- Barriers to Effective Communications
- Methods of Communicating
- Communications Skills

**Week 9 Assignments:**

1. Develop a Communications Matrix for Stakeholders
2. Develop a partial Communications Plan

**Week 10 – Risk Management**

- Identifying Risk
- Analyzing Risk
- Developing Risk Response Plans
- Monitoring Risk

**Week 10 Assignments:**

1. Write a Risk Management Plan
2. Develop a Risk Register

**Week 11 – Monitoring project progress**
• Cost and Schedule Control
• Earned Value Techniques

Week 11 Assignments:

1. Prepare for Quiz on Lecture 11 only
2. Quiz on Lecture 11

Week 12 – Quality Control

• Tools used in Quality Control
• Monitoring Quality
• Control charts
• Project change control

Week 12 Assignments:

1. Apply Quality Control Tools to a Project
2. Create and Evaluate a Project Change Request

Week 13 – Procurement Management & Project Closure

• Soliciting bids
• RFPs, RFQ, RFIs
• Source Selection
• Contract Administration
• Contract pricing

Week 13 Assignments:

1. None

Week 14 – Project Closeout and Review for Final

Week 15

• Final Exam
Course Books and Other Resources

Resources Required:

2. Students will need to download Skype (free, download takes less than 5 minutes from www.skype.com) and get a Skype ID.
3. Software to read MS PowerPoint Files, and some sort of software such as MS Word or MS PowerPoint to submit homework assignments.

Recommended, not Required:

1. “Information Technology Project Management” Kathy Schwalbe

This is my #1 recommendation for an additional reference book. Don’t let the Information Technology in the title turn you off. The only IT-specific material is in the examples, and they are basic IT that everyone is familiar with, such as upgrading a laptop. This book explains the PMBOK in much more understandable terms. Any edition will suffice (look for the cheapest) since some minor details may change, the overall project management concepts remain the same.

It is also highly recommended that you print out the slides in the lecture modules. You can use the ppt files that are posted (not the mp4 files) and you can print up to 9 slides to a page in Powerpoint, this will save paper. Since most of the exam questions comes from the slides, you must listen to the audio where more info is provided than just what is on the slide, and you can then take notes on the slides. This will be very useful for exams.

Grading Policy

Semester Grading:

30%: Average of all your homework assignments (including the 2 quizzes, quizzes will count as homework)
30%: Midterm exam
40%: Final exam
I also do not believe in "extra credit." If you need a particular grade to maintain a scholarship or other reason, then you need to **put in the effort to ensure that is the grade you earn.** Asking for extra credit at the end of the semester to bring up your grade is not the way to do it. It is unfair to the rest of the class.

At the end of the semester, after everyone's weighted averages are computed, I do grade on a curve. Meaning that if the highest average in the class is 90 instead of 100, then most likely anyone whose final weighted average is between 81-90 will earn an A.

As stated in the Course Outline section, dates for assignments and exams are posted separately in a link titled "Dates for Chats/Assignments/Exams."

**Course Structure**

Lectures are provided in topic modules in both mp4 format and also in Powerpoint slides which can be viewed with or without audio. The mp4 format is probably easier for listening on all devices. The ppt format is useful for searching for keywords, and for printing slides. (Audio is also available on those ppt files, you just have to view them in “slide show” mode.) The information contained is the same in all, however **it is highly recommended that you listen to one of the audio options as additional information/explanation is provided there that is not in the text on the slides.** The audio presentations are like going to class. You can’t expect to do well on an exam if you never attended any classes. The advantage here is that you can “attend” on your own schedule.

**Homework and Exam Grading:**

Quizzes, midterm, and final will be objectively graded. Homework is a bit more subjective. I try not to grade anyone lower than a 50 on homework, as it should be a learning experience. Nevertheless, you are expected to demonstrate effort and knowledge of the concepts as applied to a project. It is important to not just read the assignment, but to listen carefully to the lecture slides, especially the examples given, when creating your homework assignments. I do not grade on "presentation" so you don't need to spend time using decorative formats or anything. Just concentrate on **accuracy and clarity.** And homework assignments are not exams, meaning you can always ask me a question as you work on it if you
are unsure about something. In fact I encourage you to ask me questions as you work on it to make sure you are on the right track.

And whether it is a homework assignment, a quiz, or an exam, you are always expected to abide by the Academic Integrity Code. That means not using other people's work on homework assignments, and not collaborating or sharing questions and/or answers on quizzes or exams.

Academic Integrity is the cornerstone of higher education and is central to the ideals of this course and the university. Cheating is strictly prohibited and devalues the degree that you are working on. As a member of the NJIT community, it is your responsibility to protect your educational investment by knowing and following the academic code of integrity policy that is found at: [http://www5.njit.edu/policies/sites/policies/files/academic-integrity-code.pdf](http://www5.njit.edu/policies/sites/policies/files/academic-integrity-code.pdf) (Links to an external site.).

Please note that it is my professional obligation and responsibility to report any academic misconduct to the Dean of Students Office. Any student found in violation of the code by cheating, plagiarizing or using any online software inappropriately will result in disciplinary action. This may include a failing grade of F, and/or suspension or dismissal from the university. If you have any questions about the code of Academic Integrity, please contact the Dean of Students Office at dos@njit.edu.

You will be asked to verify your adherence to the Academic Integrity Code in the Introduce Yourself Discussion Question.

**Weekly Discussion Questions**

Each week I will pose one or more Discussion Questions based on the material of that week’s lecture. Discussion Questions will remain open for 2 weeks. You will not be graded on your answers as I want you to feel free to share unedited thoughts. (I much prefer your own thoughts, even if they miss the mark, than something you just paraphrased from a book, as the purpose of them is to get you to think about the material, not just look up an answer.) However, at the end of the semester, your level of participation in the Discussions can impact you positively or negatively depending on your participation.
Weekly Skype Sessions

I will hold a Skype Chat Session on Wednesday evening at 8:15pm ET. It is highly recommended you attend, as this is your opportunity to ask questions and for me to clarify anything that might be confusing you. Oftentimes examples will be given that may appear on exams. So attending is very useful. But it is only useful if you come prepared, which means being familiar with the material prior to the session. Please follow the instructions in the Discussion Question “Please Post Your Skype ID” for directions on how to get added to the Skype group.

My Contact Information

Best way to reach me is through my email: heuer@njit.edu

Or my Skype ID which is ava.heuer (though email is much preferred, I’m not on Skype that often.)