

Fall 2019

# EM 636-853: Project Management

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# EM 636 Project Management Distance Learning

## Syllabus

**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 from 9:15pm – 10:30pm ET to discuss key points of the lecture material and to answer any questions anyone may have.

## 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
- 2.) Read **ALL** the information in the various links posted under Welcome Kit and Syllabus on our Canvas course page
- 3.) Reply to the "Introduce Yourself" thread in the Discussions or in the Introduce Yourself Module.
- 4.) Follow the directions in the Your Skype ID thread in Discussions
- 5.) Do the pre-class assignment reading
- 6.) Any questions, contact me at heuer@njit.edu

## Course Learning Objectives

By the end of this course, you should:

- Understand how to properly plan a project
- Know what all the different parts of a project plan are (it's 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

### 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

*Quiz 1 covering Weeks 1 and 2*

**Team Assignments Announced**

**Team Project Choices Distributed for Selection**

### Week 3 – Human Resource Management

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

*Team Assignments:*

*1) Team Personality Analysis*

*2) Team Ground Rules*

### Week 4 – Initiating a Project

- Developing a project charter
- Generating Requirements

*Team Assignments:*

- 1) *Project Stakeholder Analysis and*
- 2) *Project Charter*

**Week 5 - Developing the Scope Baseline**

- Writing a Scope Statement
- Developing the Work Breakdown Structure

*Team Assignments:*

- 1) *Outline for Scope Management Plan*
- 2) *Scope Statement*
- 3) *Work Breakdown Structure*

**Week 6 – Developing the Schedule Baseline**

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

*Team Assignments:*

- 1) *Outline for a Schedule Management Plan*
- 2) *Duration Estimates for Activities*

**Week 7 – Developing the Cost Baseline**

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

*Team Assignments:*

- 1) *Outline for a Cost Management Plan*
- 2) *Cost Estimates for Activities*

**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

*Team Assignments:*

- 1) *Write a Quality Policy*
- 2) *Create quality metrics*

**Week 9 – Communications Management**

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

*Team Assignment:  
Communications Management Plan*

### **Week 10 – Risk Management**

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

*Team Assignments:  
1) Risk Management Plan  
2) Risk Register*

### **Week 11 – Monitoring project progress**

- Cost and Schedule Control
- Earned Value Techniques

*No homework*

*Quiz on Cost Control only*

### **Week 12 – Quality Control**

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

*Team Assignments:  
1) Applying Quality Control Tools to a Project  
2) Creating and assessing a project change request*

### **Week 13 – Procurement Management & Project Closure**

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

*No homework*

## Week 14 – Project Closeout and Review for Final

### Week 15

- Final Exam

# Course Books and Other Resources

## Resources Required:

1. A Guide to the Project Management Body of Knowledge (PMBOK) Sixth Edition
2. Students will need to download Skype (free, download takes less than 5 minutes from [www.skype.com](http://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.

# 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.

### 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.

**And whether it is a homework assignment, a quiz, or an exam, you are always expected to abide by the Academic Honor 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.**

### Weekly Discussion Questions

Each week I will pose one or more Discussion Questions. You will not be graded on your answers as I want you to feel free to share unedited thoughts. However, at the end of the semester, your level of participation in the Discussions can impact you one way or the other.

## My Contact Information

Best way to reach me is through my email: [heuer@njit.edu](mailto:heuer@njit.edu)

Or my Skype ID which is ava.heuer